sustainable savings

Measurement, Metering & Display via e•communicants

legrand®

Measurement, Metering & Display via e•communicants

MEASURE SOFTWARE 32 Cat.No 261 88

User Manual

version 1.3

N0758A01PC-11W16

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1. LICENCE AGREEMENT

LICENSE AGREEMENT

IMPORTANT*:*

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2. SYSTEM REQUIREMENTS

- **Hardware**
  - Intel® Core 2 Duo or AMD® Athlon X2® processor
  - 2GB of RAM
  - 320MB of available hard-disk space
  - USB port for protection dongle
- **Supported operating systems**:
  - Microsoft® Windows® XP (Professional) with Service Pack 3
  - Microsoft® Windows Vista® with Service Pack 2
  - Microsoft® Windows 7® with Service Pack 3
- **Installation et Display:** on Computer

3. COMPATIBLE DEVICES*

- **“Measure Software 32”**
  - Management up to 32 devices
- **Version 1.07.00**
  - Range **EMDX³**
    - Multifunction measuring devices:
      - Modular - Cat.No **046 76**
      - Access - Cat.No **146 68**
      - Premium - Cat.No **146 69**

* Measuring / metering devices

3. COMPATIBLE DEVICES*

- Range **EMDX³**
  - Energy counters RS485 :
    - Single-phase direct connection – Cat.Nos **046 77** (standard), **046 79** (MID)
    - Three-phase direct connection – Cat.Nos **046 80** (standard), **046 83** (MID)
    - Three-phase connection with CT– Cat.Nos **046 84** (standard), **046 86** (MID)
  - Energy counters with pulse output (with the Concentrator Cat.No **046 87**):
    - Single-phase direct connection – Cat.Nos **046 70-81-72** (standard), **046 78** (MID)
    - Three-phase direct connection – Cat.Nos **046 73** (standard), **046 82** (MID)
    - Three-phase connection with CT– Cat.Nos **046 74** (standard), **046 85** (MID)

* Measuring / metering devices

3. COMPATIBLE DEVICES*

- Range **DPX³**
  - **DPX³ 250 electronic** only versions **with integrated measurement unit**
    - via the communication module Cat.No **4 210 75**
- Range **DMX³** with protection unit – touchscreen (Cat.No **0 288 03/04**)
  - via the communication module Cat.No **0 288 05**

* Measuring / metering devices

3. OTHERS COMPATIBLE DEVICES**

- Range **DPX³**
  - **DPX³ 160 thermal-magnetic with integrated RCD**
  - **DPX³ 250 electronic, electronic with integrated RCD** and **thermal-magnetic with integrated RCD**
    - via the communication module Cat.No **4 210 75**
- Range **DMX³** with protection unit – LCD screen (Cat.No **0 288 00/01/02**)
  - via the communication module Cat.No **0 288 05**

** Devices without measuring / metering data

4. LANGUAGES AVAILABLE

- **Languages:**
  - Belgian Dutch
  - Belgian French
  - Dutch
  - English
  - French
  - Italian
  - Spanish

5. PRELIMINARY OPERATIONS

Before commissioning the installation we recommend you to contact your technical customer service to verify if a software update is available.

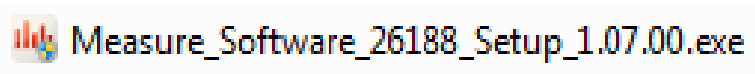
(After receiving the update file follow the procedure detailed on pages 20 to 24 of this manual)

6. IMPLEMENTATION - installation

- Materials required
  - Installation Kit (executable file .exe)
  - A computer with a compatible operating system (XP, etc.)

INSTALLATION

- Run the file



- Choose the language
- Click on the button “OK”

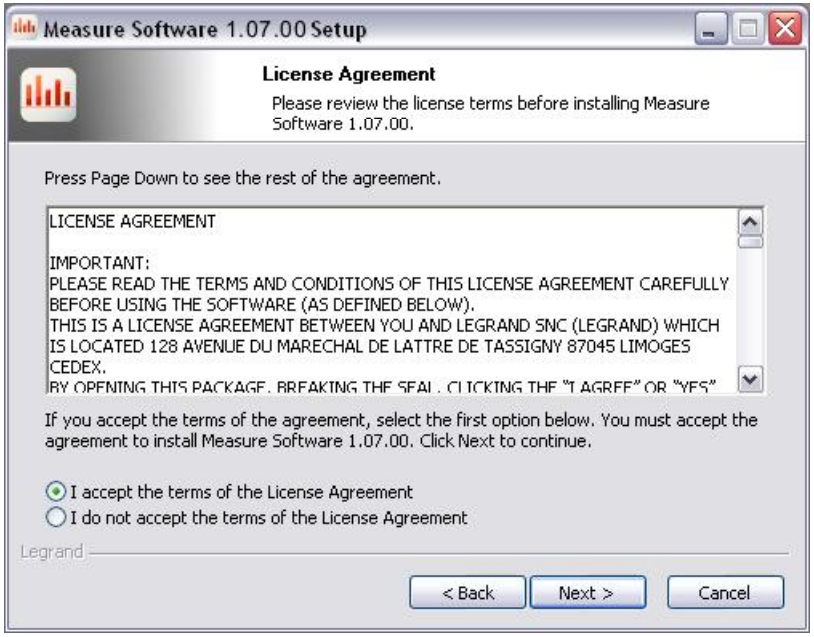
INSTALLATION

- Click on the button “Next”

Measure Software 1.07.00 Setup
legrand
Measure Software
Copyright Legrand SNC
Welcome to the Measure Software 1.07.00 Setup Wizard
This wizard will guide you through the installation of Measure Software 1.07.00.
It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.
Click Next to continue.
Next >
Cancel

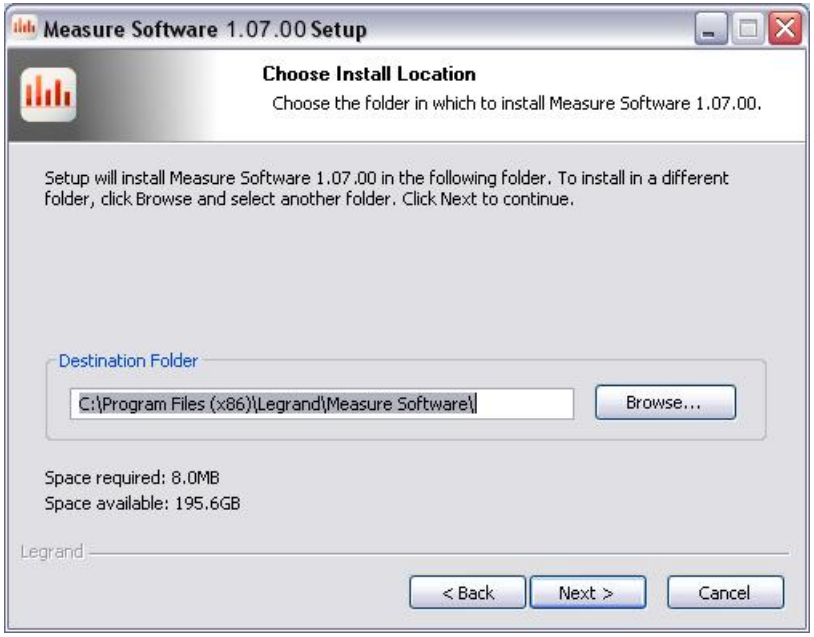
INSTALLATION

- Read and accept the terms of the LICENCE
- Click on the button “Next”


Measure Software 1.07.00 Setup
License Agreement
Please review the license terms before installing Measure Software 1.07.00.
Press Page Down to see the rest of the agreement.
LICENSE AGREEMENT
IMPORTANT:
PLEASE READ THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE (AS DEFINED BELOW).
THIS IS A LICENSE AGREEMENT BETWEEN YOU AND LEGRAND SNC (LEGRAND) WHICH IS LOCATED 128 AVENUE DU MARECHAL DE LATTRE DE TASSIGNY 87045 LIMOGES CEDEX.
If you accept the terms of the agreement, select the first option below. You must accept the agreement to install Measure Software 1.07.00. Click Next to continue.
I accept the terms of the License Agreement
I do not accept the terms of the License Agreement
Legrand
< Back
Next >
Cancel

INSTALLATION

- Choose the installation Folder
- Click on the button “Next”


Measure Software 1.07.00 Setup
Choose Install Location
Choose the folder in which to install Measure Software 1.07.00.
Setup will install Measure Software 1.07.00 in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.
Destination Folder
C:\Program Files (x86)\Legrand\Measure Software\
Browse...
Space required: 8.0MB
Space available: 195.6GB
Legrand
< Back
Next >
Cancel

INSTALLATION

- Choose a Folder for the Start menu (**default**: Legrand\Measure Software)
- Click in the button “Install”

INSTALLATION

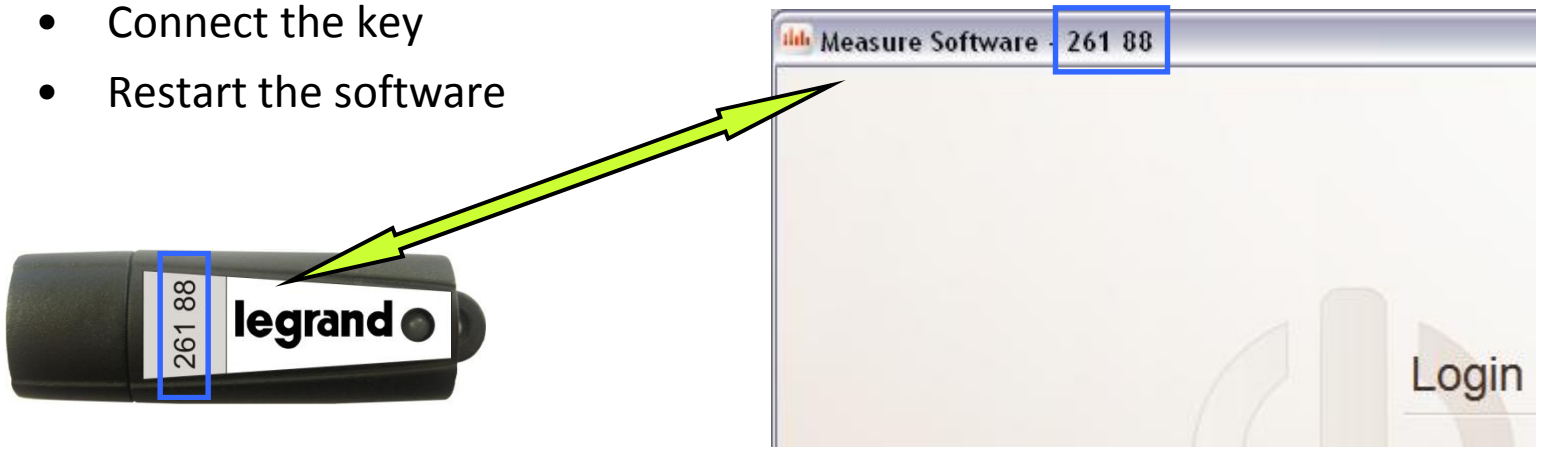
- Installation completed
- Click on the button “Finish” (**default**: option “Run the Measure software” selected)

INSTALLATION : protection dongle on USB port

- Run the software and check the indication beside the icon
  - protection dongle detected: ⇨ **OK**

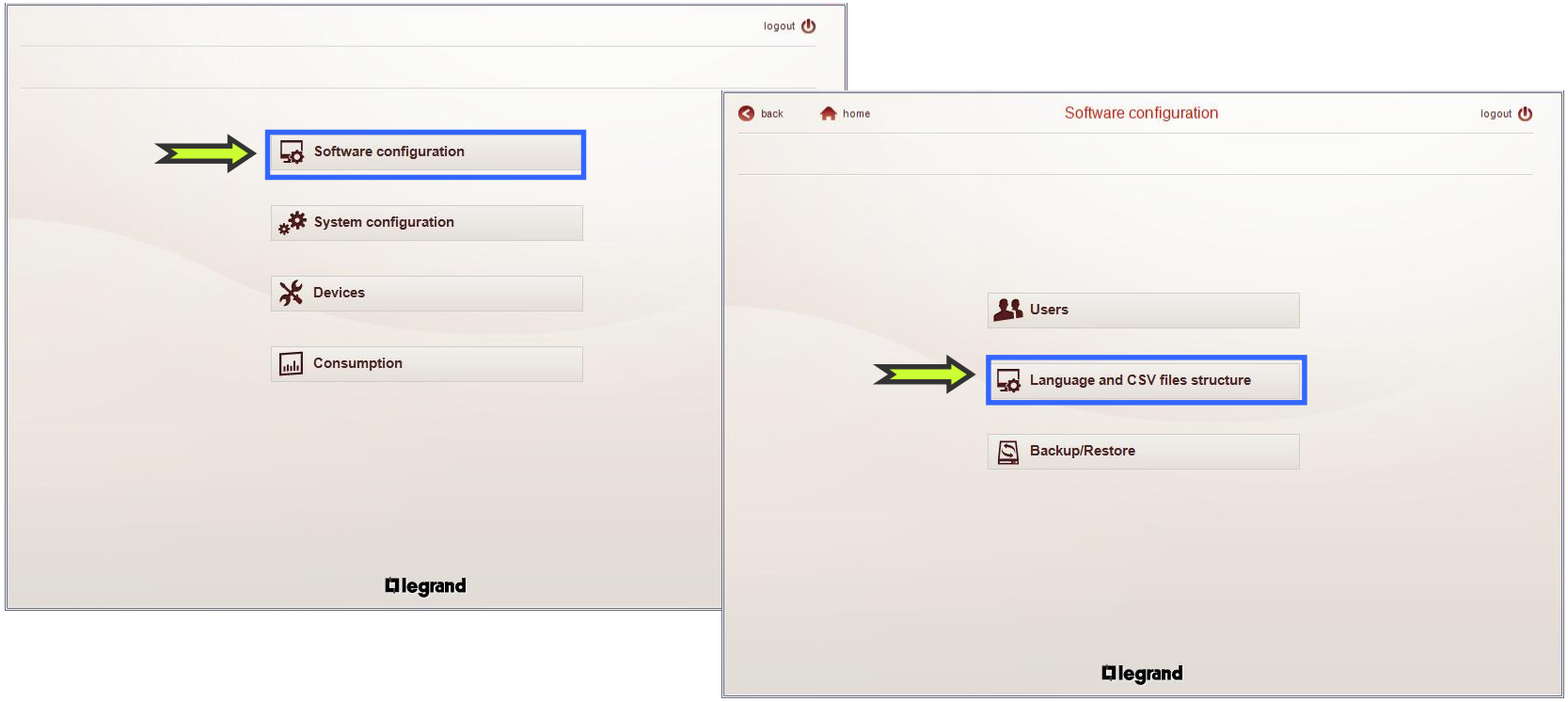
  - protection dongle not detected:

    you must
    - Close the software
    - Connect the key
    - Restart the software



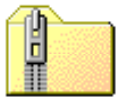
6. IMPLEMENTATION – Update

1. Click on “Software configuration”
2. Click on “Language and CSV files structure”



UPDATE

- Materials required:
  - File received from technical customer service:
    Measure_Software_26188_Vv_r_b.zip



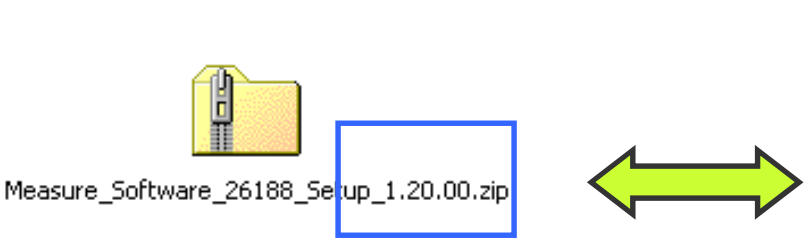
Measure_Software_26188_Setup_1.20.00.zip

Measure Software = Product Name
26188 = Product reference
Vv_r_b = Version of the embedded application

    - The folder .zip contains the following files:
      - **README.pdf**, indicates what's new in the software
      - **Measure_Software_26188_Setup_v.r.b.exe**, software update package
      - **User Manual.pdf**
- Procedure for updating the web server
  - See the following pages

UPDATE

- Comparison of updating file and product versions



Example : File : V1.20.0 Product : V1.7.0

⇨Update the Software if the file version is more recent than the product version

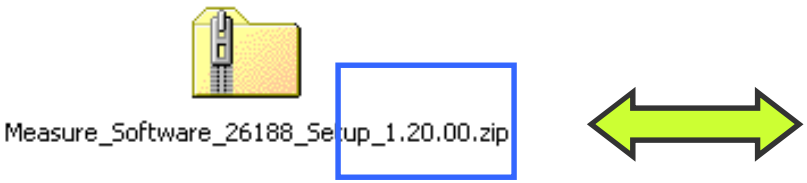
UPDATE

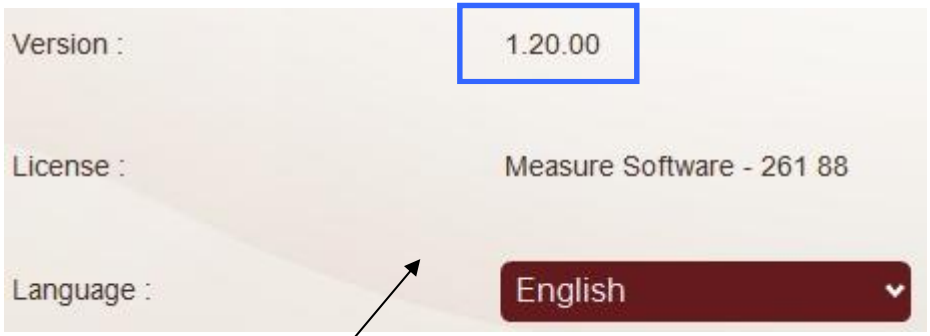
- Updating the Software:
  1. Extract from the folder .zip the file

     Measure_Software_26188_Setup_v.r.b.exe
  2. Repeat the installation of the software according to the procedure detailed on pages 11 to 17
  3. Verify that the updating has been done: see the next page

UPDATE

- Verifying of the updating



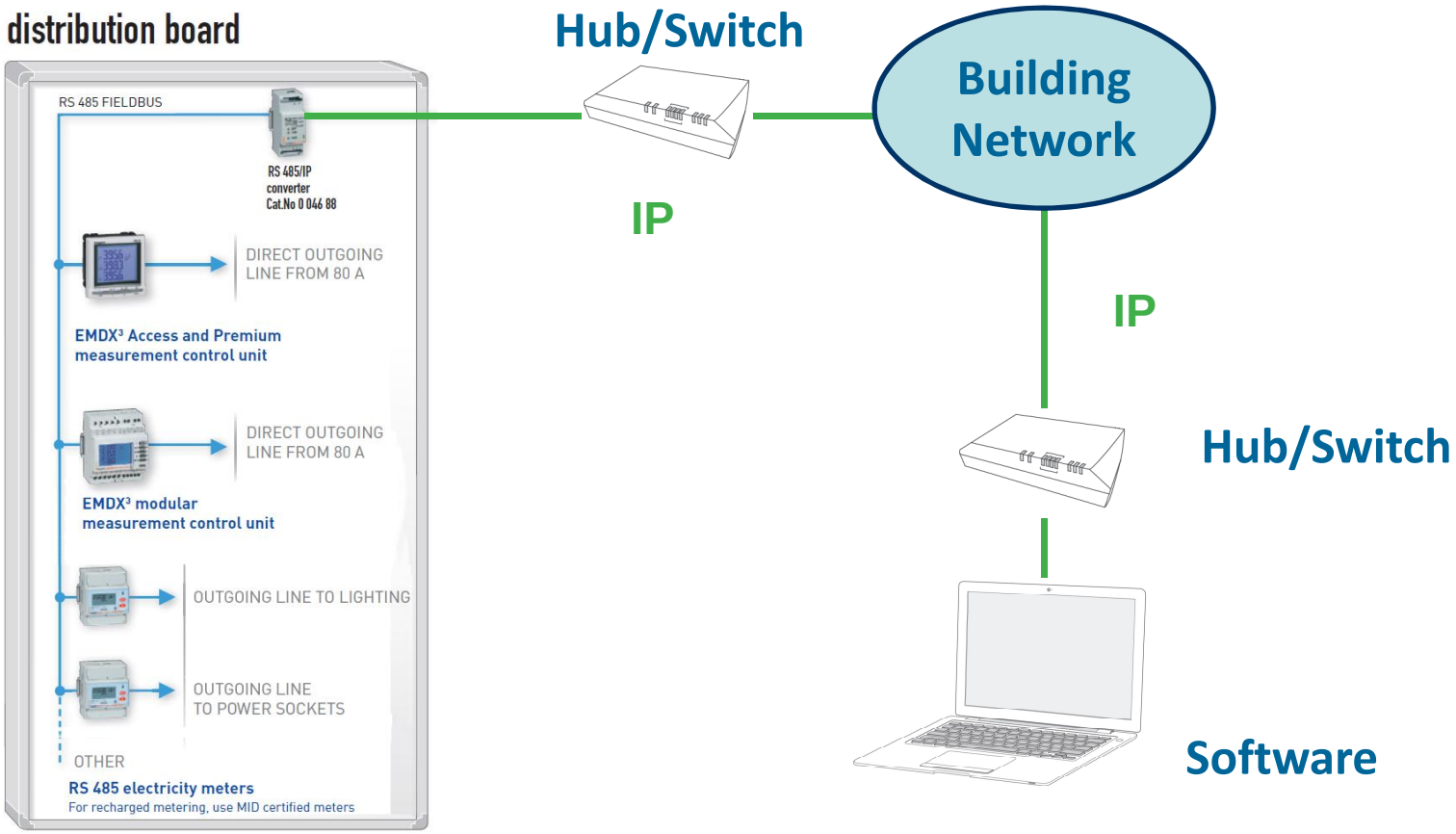


Example : File : V1.20.0 Product : V1.20.0 ⇨ OK

6. IMPLEMENTATION - Settings

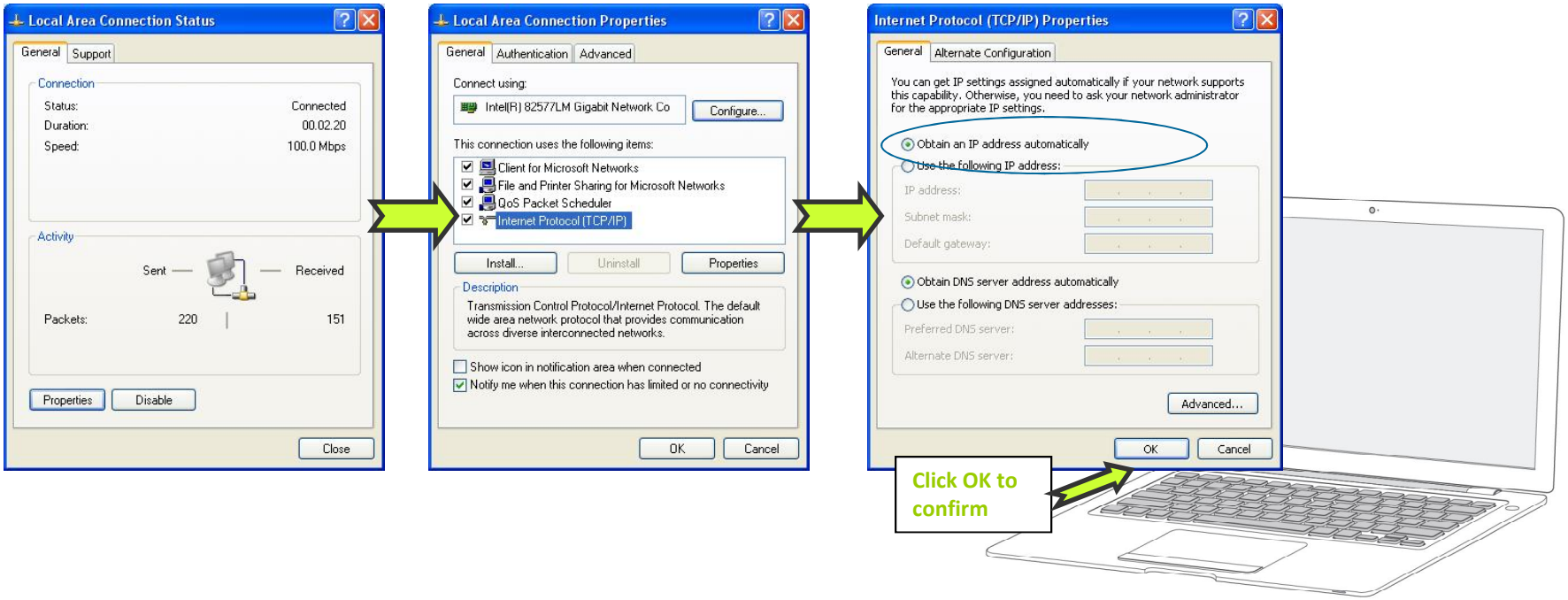
- Settings / configurations of the electrical installation
  - Procedure to configure the different measuring devices on the software
- Materials required
  - Software Cat.No 261 88 user manual
  - A computer with a compatible operating system (XP, etc.) and the software installed
- Useful Information
  - Network and RS485 bus parameters for Gateways and Measuring devices (use the **Parameters Table of the Software 32** contained on the CD Rom)

SETTINGS – Connection scheme



SETTINGS – Computer

- Standard configuration of the computer, automatic IP address



SETTINGS - Access

- Run the Software.
- On the login page, enter the PIN code: 99999 (default PIN code) and click OK

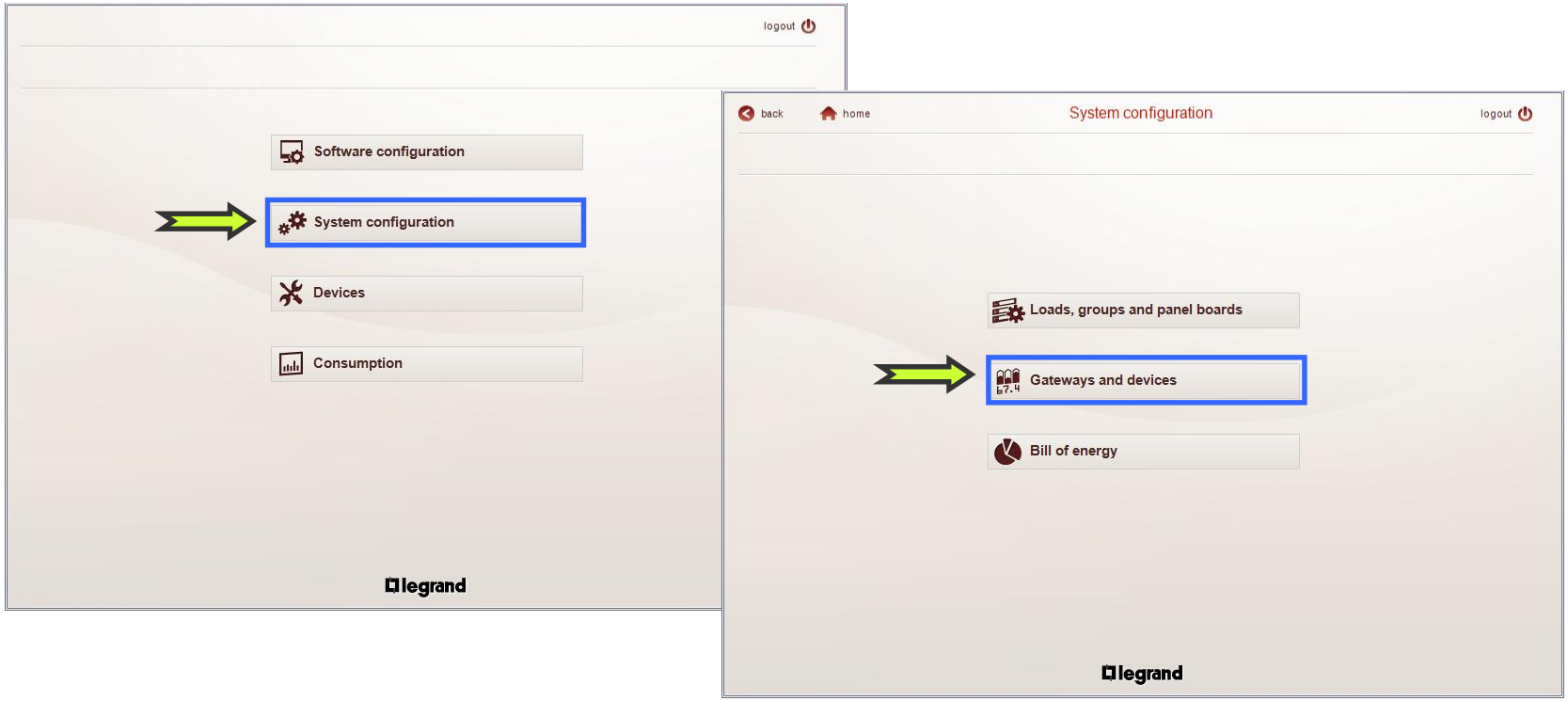
SETTINGS - System Configuration

- How to Configure the electric installation (system). Follow the instructions on the next pages

- Configuration sequence:
  1. **Gateways and Devices** configuration
  2. **Loads, Groups and Panel boards** configuration
  3. **Bill of Energy** configuration

SETTINGS – 1. Gateways and Devices

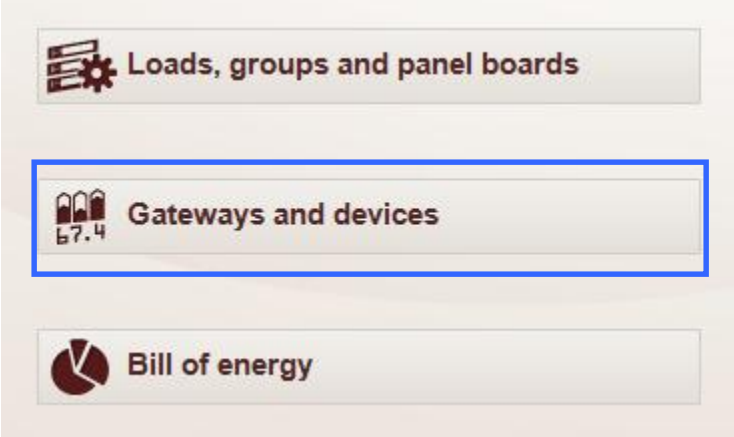
- **Configuration required**
  1. Click on “System Configuration”
  2. Click on “Gateways and devices”



SETTINGS – 1. Gateways and Devices

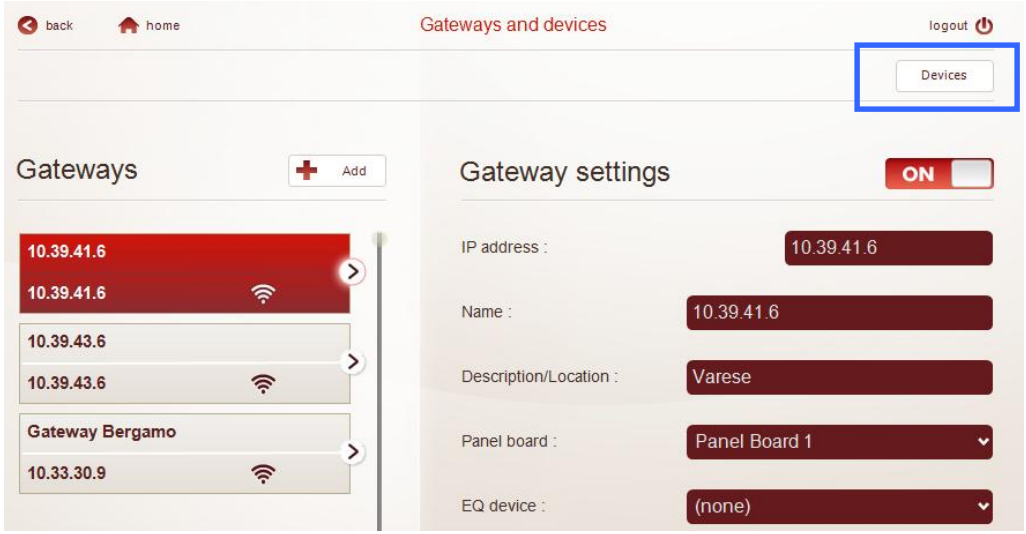
- **Architecture pages of the Software**

  - **Gateways:** only one configuration page for the gateway(s).
  - **Devices:** one page to configure the devices of each gateway (a gateway bring together one or more devices connected to the RS485 bus)



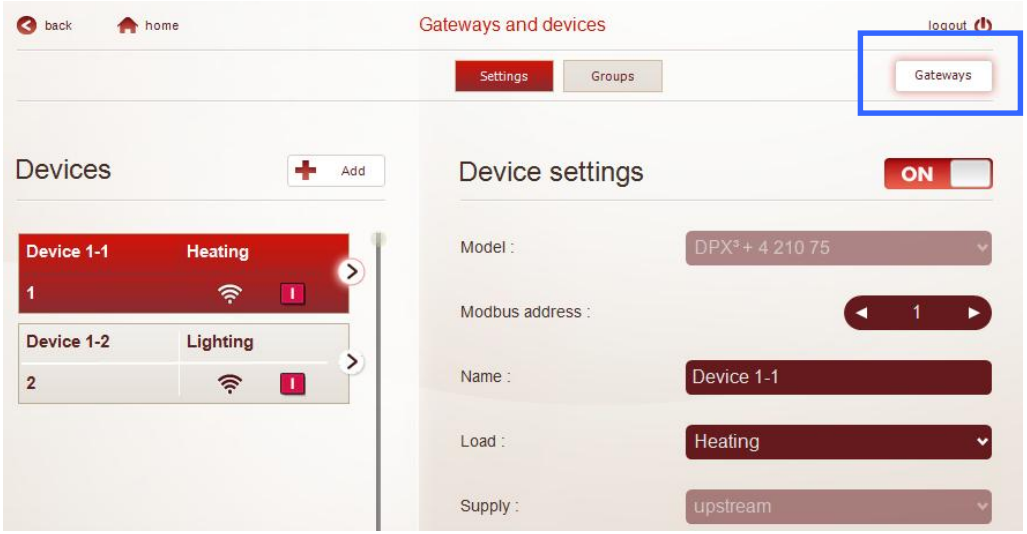
SETTINGS – 1. Gateways and Devices

- **Description of the Gateway page**: structure and navigation
  - **on the left**: complete list of the gateways added (all the Gateways of the installation). **In red,** the selected gateway.
  - **on the right:** parameters of the selected gateway
  - **in the upper right**: button to jump at the page of the Devices connected to the selected gateway



SETTINGS – 1. Gateways and Devices

- **Description of the Devices page**: structure and navigation
  - **on the left**: complete list of the devices added (all the Devices connected to the selected Gateway). **In red,** the selected device.
  - **on the right:** parameters of the selected device.
  - **in the upper right**: button to return to the Gateway page.



SETTINGS – 1. Gateways and Devices

- **Creating and Saving Gateways**

  How to create a **Gateway**

  1. Click on the button

  2. Assign an **IP Address*** and a **Name*** **(required parameters)**

  3. Click on the button

  4. Click on the button

 to verify the correct operation of the communication between the Web Server and the Gateway
  5. Click on the button

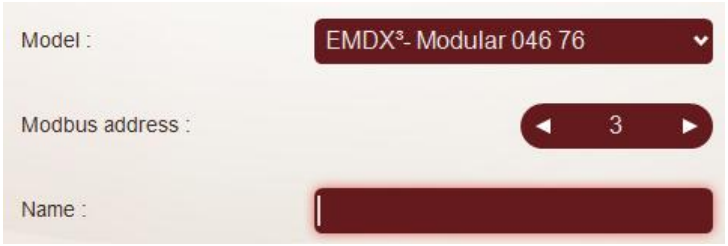
 to configure the Devices connected to the Gateway

SETTINGS – 1. Gateways and Devices

- **Creating and Saving Devices**

  Procedure for **Measure devices with RS485 output**

  1. Click on the button [Add]
  2. Choose the **Model****
  3. Assign a **Modbus Address*** [◄] [►] and a **Name*** **(required parameters)**



  4. Click on the button [Save]
  5. Click on the button [Test] to verify the correct operation of the communication
  6. Repeat the operations **1.⇨ 2. ⇨ 3**. to add more devices
  7. Click on the button [Gateways] to end

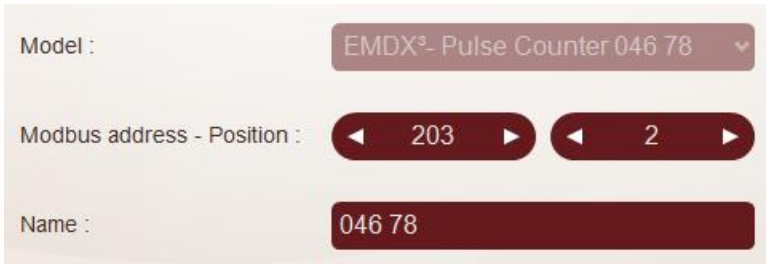
SETTINGS – 1. Gateways and Devices

- **Creating and Saving Devices**

  Procedure for **Measure devices with pulse output** (details on next page)

  1. Click on the button

  2. Choose the **Model****
  3. Assign a **Modbus Address*** , the **Position*** and the **Name*** **(required parameters)**



  4. Click on the button

  5. Click on the button

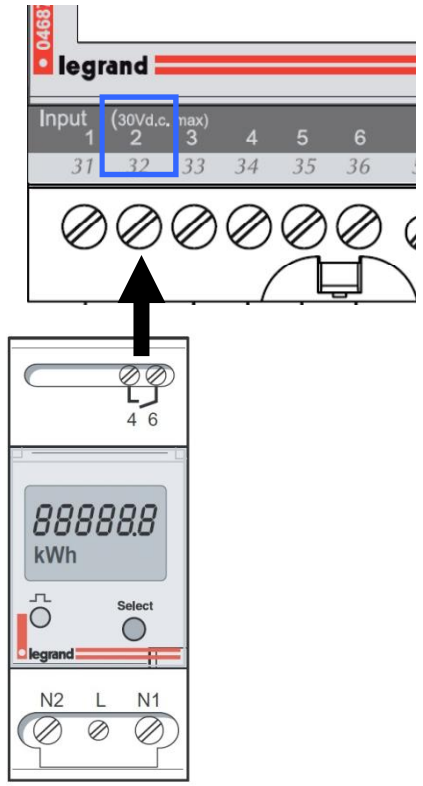
 to verify the correct operation of the communication
  6. Repeat the operations **1.⇨ 2. ⇨ 3**. to add more devices
  7. Click on the button

 to end

SETTINGS – 1. Gateways and Devices

Details for **Pulse output Meters**:

– **Position:** is the input of the Concentrator (Cat.No **046 87**) on which the counter is connected



– **Verification by the button**

Click on the button to check the proper functioning of the communication, as well as the input assignment of the Concentrator shown in the "Position"

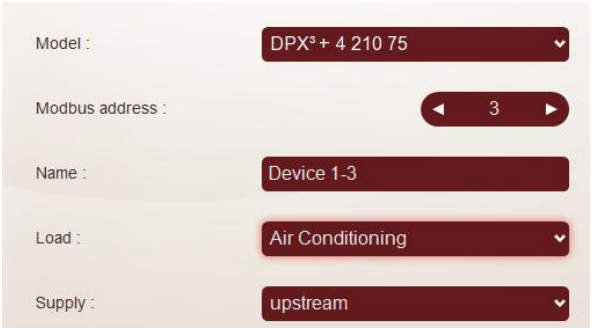
SETTINGS – 1. Gateways and Devices

- **Creating and Saving Devices**

  Procedure for Circuit-breakers **DPX³ and DMX³**

1. Click on the button

2. Choose the **Model****, assign a **Modbus Address***, the **Nom**** **(required parameters)** and the **Supply direction** of the Circuit-breaker (details on the next page)



3. Click on the button

4. Click on the button

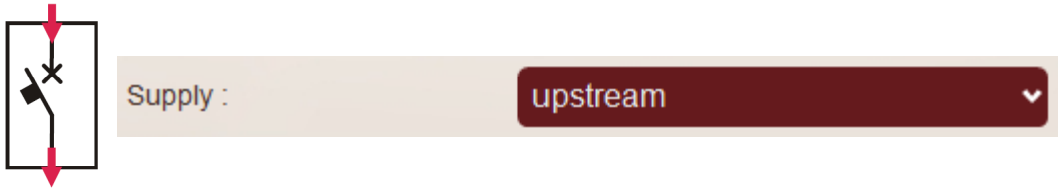
to verify the correct operation of the communication
5. Repeat the operations 1.⇨ 2. ⇨ 3. to add more devices
6. Click on the button

to end

SETTINGS – 1. Gateways and Devices

Details for Circuit-breakers DPX³ and DMX³:

- **Supply:** to ensure correct measurement of various electrical quantities, it is necessary to indicate the Supply direction of the circuit-breakers:
  - Circuit-breaker supplied from the top → choose “upstream” **(Default setting)**



  - Circuit-breaker supplied from the top → choose “downstream”

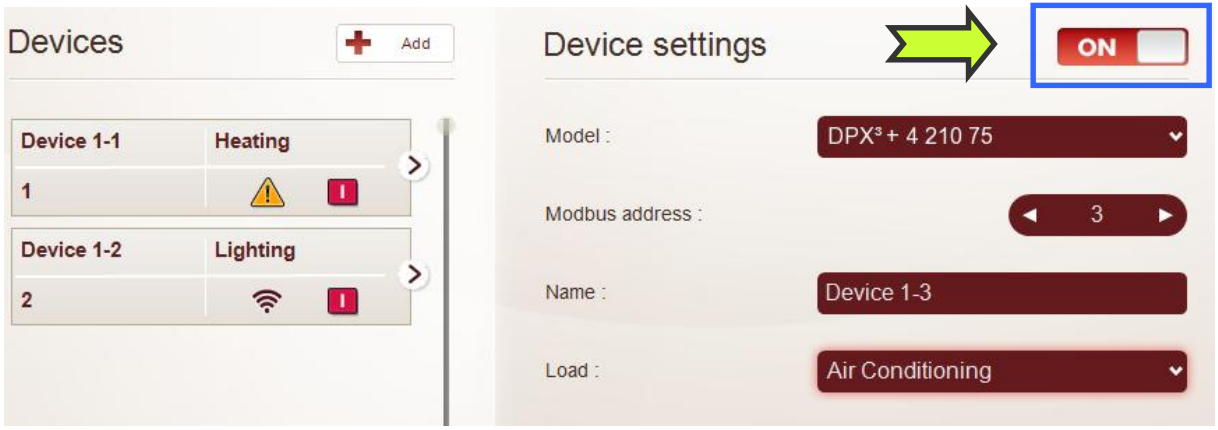
Note: to modify this setting it is necessary to delete and recreate the device.

SETTINGS – 1. Gateways and Devices

- **Description of System Functions: ON/OFF button**

  - Allows to enable/disable a Gateway or Device
  - Available for Gateways and Devices

    The deactivation of a Gateway causes the deactivation of all devices connected to it.



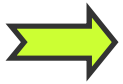
SETTINGS – 1. Gateways and Devices

- **Description of the operating indications of Gateways and Devices**
  - Page **System configuration**, for Gateways and Devices
  - Page **Devices**

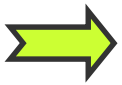
  - ON/OFF button =

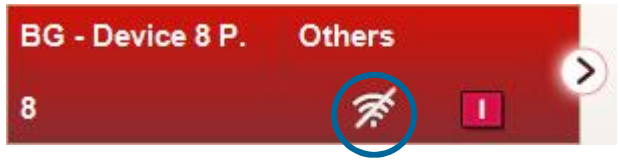
    - Correct operation

    - Communication problem

  - ON/OFF button =

SETTINGS – 1. Gateways and Devices

- **Description of the operating indications of Devices**
  - Page **System configuration / Devices**
    - Visualization of the Circuit-breaker status (DPX^3 and DMX^3)

– Circuit-breaker Closed

– Circuit-breaker Open

– Circuit-breaker Tripped

SETTINGS – 1. Gateways and Devices

- **Description of System Functions: Display**
  - Page **Consumption** ⇨ **Grand Total / Partial / Details**
  - ON/OFF Button =

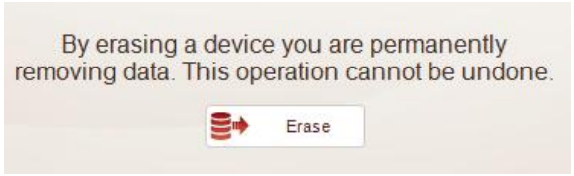
⇨ **Data non recorded**

SETTINGS – 1. Gateways and Devices

- **Description of System Functions:** “Delete” button

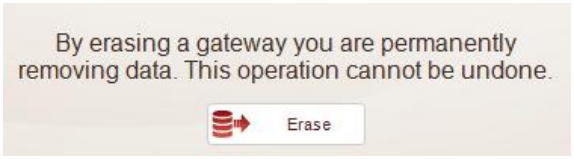
  - Page **System configuration**, for Gateways and Devices
  - Page Devices,

allows to delete a Device



  - Page Gateway,

allow to delete a Gateway
    - **NOTE:** To erase a Gateway, is necessary initially delete all the devices connected to it!

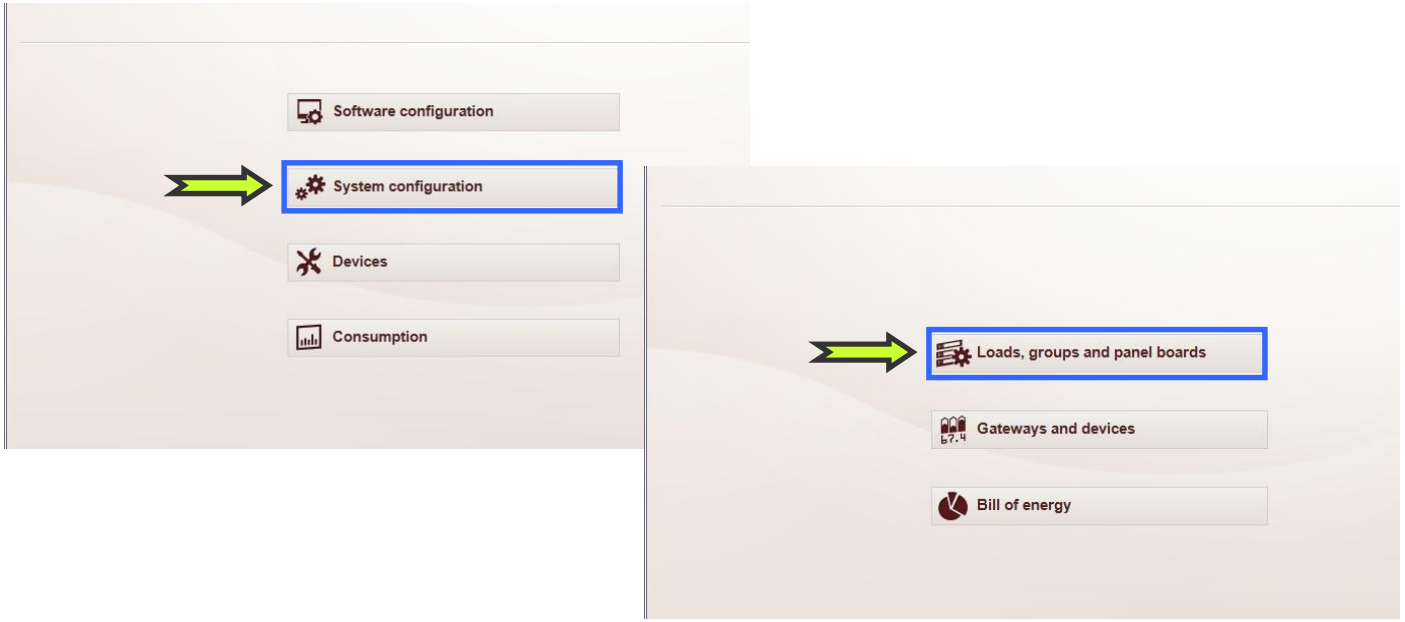


SETTINGS – 1. Gateways and Devices

- **List of the Required parameters:**
  - * Highly required parameters – **Address/Name/Position:**
    - IP Address, a different IP address for each gateway
    - Modbus Address, a different Modbus address for each device connected to the same bus RS485
    - Name, impossible to use several times the same name
    - Positions, different for wiring reasons
      - only for Counters with pulse output
  - ** Useful parameter – **Model**:
    - Possibility to have one, two or several identical models

SETTINGS – 2. Loads, groups and panel boards

- Optional setup, used to give a description of the electrical installation by panel board(s), load(s) and group(s)
  1. Click on **“System configuration”**
  2. Click on **“Loads, groups and panels boards”**



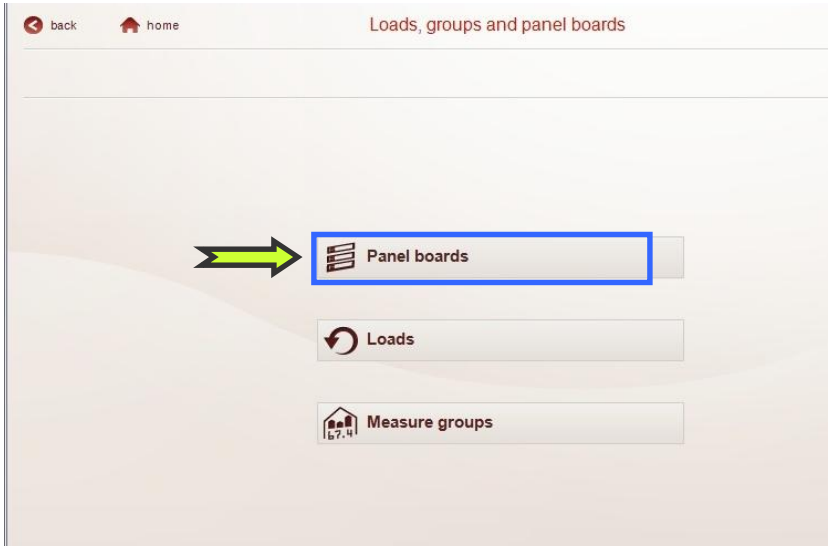
SETTINGS – 2. Loads, groups and panel boards

- **Creating Panel boards**

  for a physical distribution of the different panel boards of the installation

  ⇨Recommended architecture: <u>only one</u> Gateway per Panel board

  Click on **“Panel boards”**



SETTINGS – 2. Loads, groups and panel boards

- **Creating Loads**

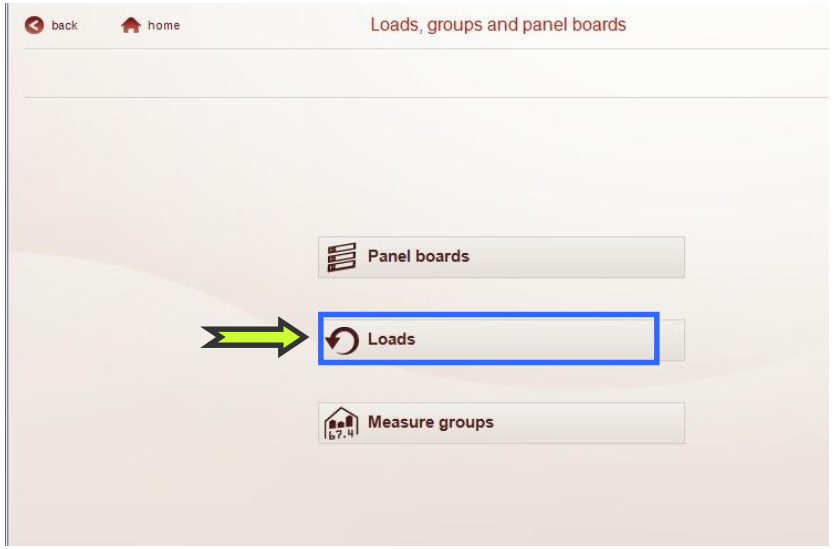
  are available:

  – 6 “pre-defined” categories (heating, air conditioning, etc.)
  ⇨ according by the Thermal Regulations 2012 (RT 2012)

  – Category **“Others”** to display the measurement without Load assigned

  – 8 additional categories, user-creatable

Maximum of 14 loads

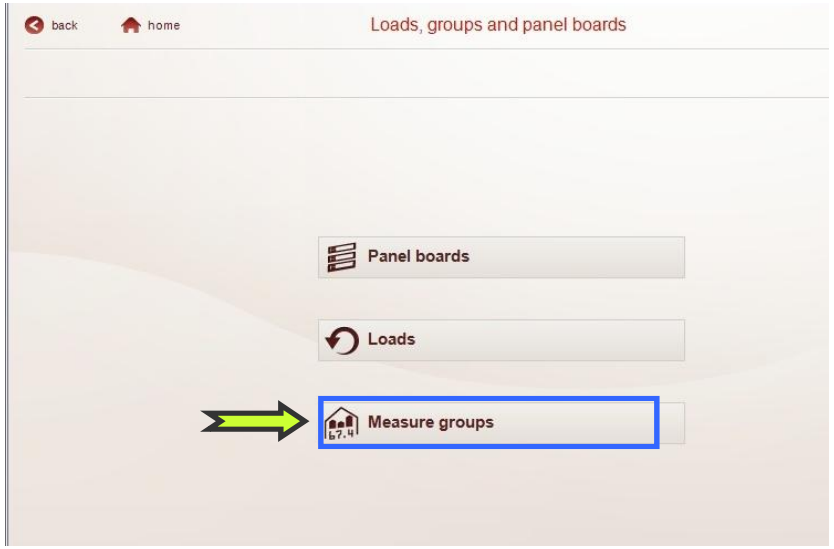


SETTINGS – 2. Loads, groups and panel boards

- **Creating Groups**

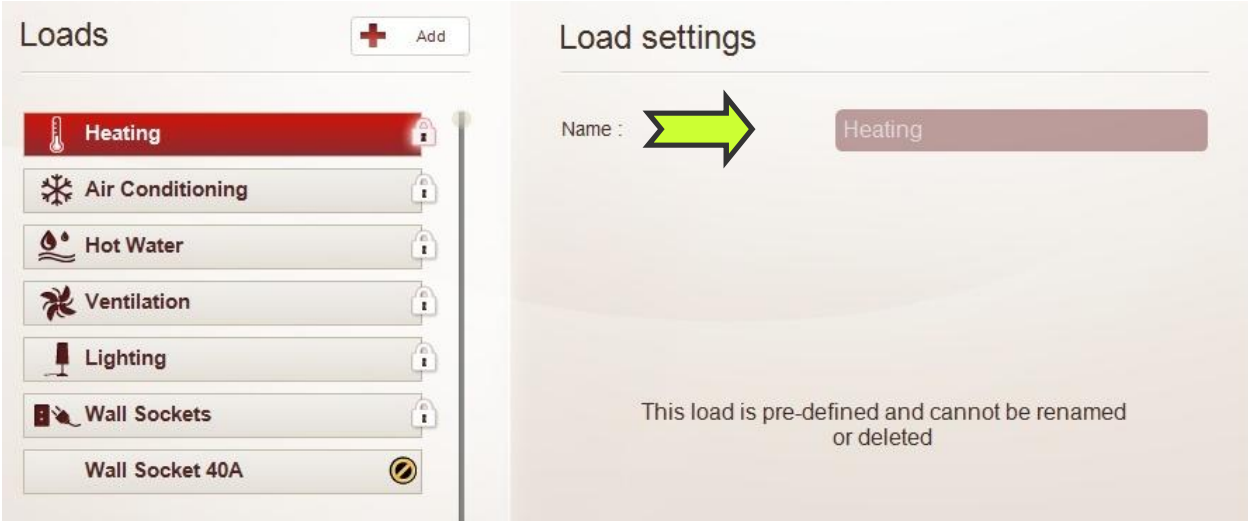
  for a logical distribution of the measuring points of the installation

  – Each device may be associated with several groups <u>simultaneously</u> (maximum 5).



SETTINGS – 2. Loads, groups and panel boards

- **Description of Pages Loads/Groups/Panel boards**
  - **on the left:** complete list of the Loads, Groups or Panel boards. **In red,** the selected Load/Group/Panel board
  - **on the right:** specific parameters of the selected Load/Group/Panel board



SETTINGS – 2. Loads, groups and panel boards

- **Creating and saving Loads, Groups and Panel boards**

1. Click on "**Panel boards, Load types or Measure groups**"
2. Click on the button

3. Enter the **Name** and the **Description/Location** (Description and location only for Panel boards and Measure groups)

4. Click on the button

SETTINGS – 2. Loads, groups and panel boards

- **Assignment of Panel boards**
  1. Return to the section **"Gateways e Devices"** in **"System configuration"**
  2. In the **Gateways** page, is possible to assign each gateway (previously created) to a Panel board (a gateway can be assigned to only one panel board)

  – Click on the button

SETTINGS – 2. Loads, groups and panel boards

- **Assignment of Loads**
  1. Return to the section **"Gateways e Devices"** in **"System configuration"**
  2. In the **Devices** page ⇨ button Settings
     is possible to assign the **Loads** to each Device previously created

  – Click on the button Save

SETTINGS – 2. Loads, groups and panel boards

- **Assignment of Measure groups**
  1. Return to the section **"Gateways e Devices"** in **"System configuration"**
  2. In the **Devices** page ⇨ button Groups

     Is possible to assign each Device, previously created, to one or more Measure group(s)

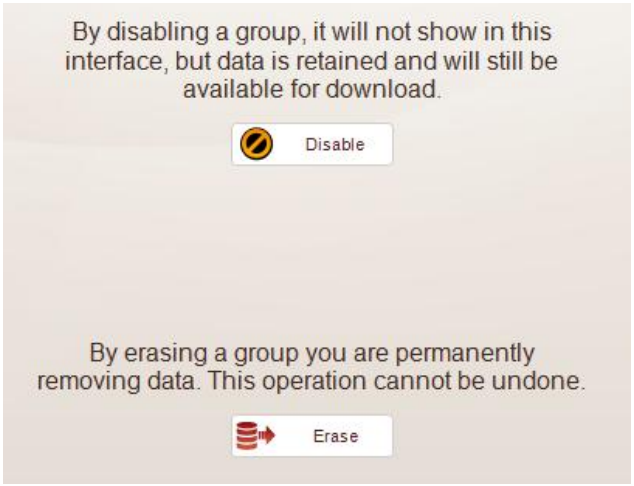
  – Click on the button Save

SETTINGS – 2. Loads, groups and panel boards

- **Description of System Functions**: Button

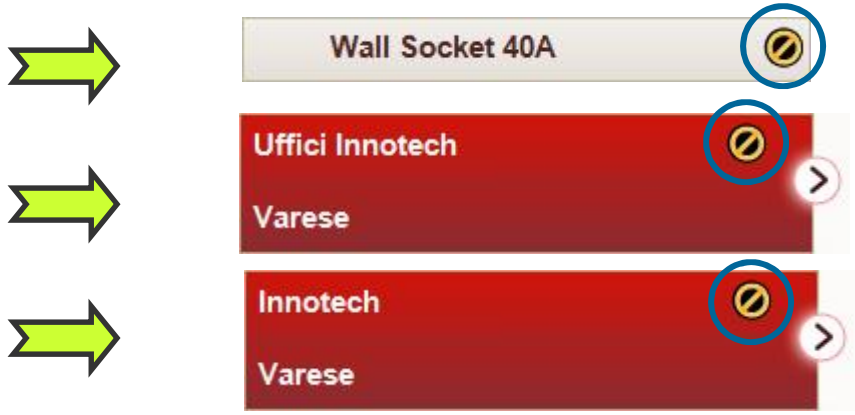
  - Page **"System Configuration"**, then page **"Measure groups"** or **"Panel boards"**
  - **Note**: not available for the pre-defined loads (RT2012)
  - The button

allows to enter to an intermediate page in which the deactivation (Disable) or the elimination (Erase) of a Group or a Panel board is proposed


By disabling a group, it will not show in this interface, but data is retained and will still be available for download.
Disable
By erasing a group you are permanently removing data. This operation cannot be undone.
Erase

SETTINGS – 2. Loads, groups and panel boards

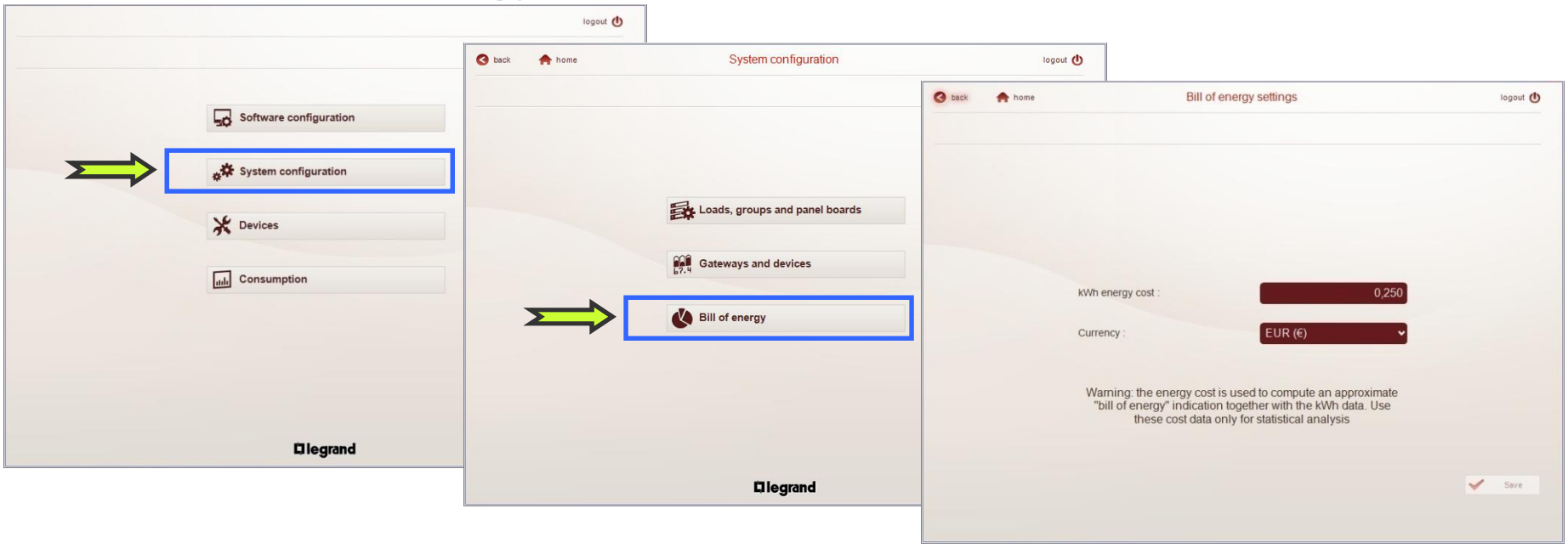
- **Description of the operating indications**
  - Page **System configuration** then page **Loads, groups and Panel boards**
  - **Disabled** Status:
    - Loads
    - Groups
    - Panel boards



SETTINGS – 3. Bill of energy

- Optional setting, allows the economic accounting of energy consumption

1. Click on **“System configuration”**
2. Click on **“Bill of energy”**



SETTINGS – 3. Bill of energy

- Assign the average **kWh energy price** and the **Currency**

- Click on the button

IMPORTANT: the cost of energy is approximate, usable for statistical purposes only

7. USE: Access

- The access to the Software data is protected, a identification code is required (PIN code and PUK code)

- 3 types of “default” users
  - “**administrator**”
  - “**installer**”
  - “**user**”

  The home page ("home") will be different depending on the type of user

  It is possible to add other users

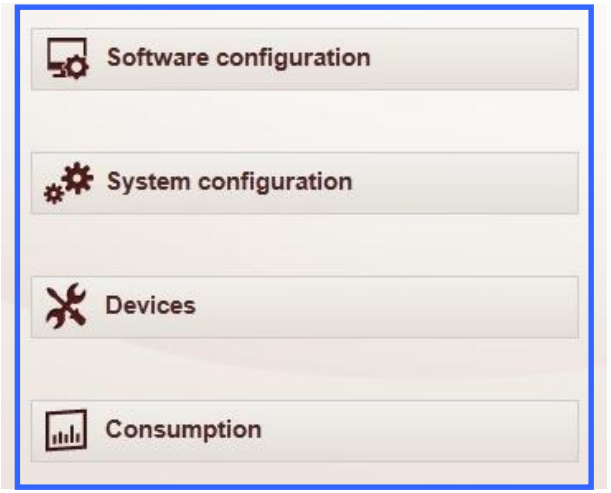
USE - “Default” Users

- “**administrator**”: access to all pages of the web server

  – Default access code:

    PIN : **99999**

Home page



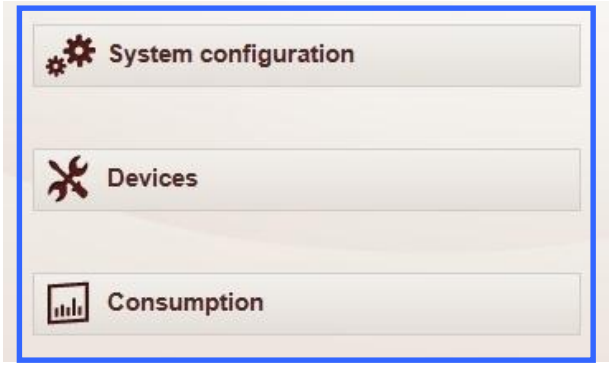
USE - “Default” Users

- “**installer**”: access to all pages of the web server except the page “Web Server Configuration”

  – Default access code:

    PIN : **55555**

Home page

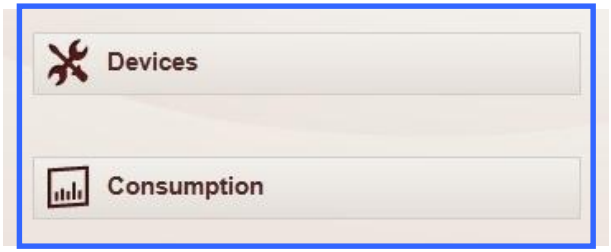


USE - “Default” Users

- “**user**”: limited access to display pages of data (not possible configuration in mode “user”)

  – Default access code :
  PIN : **11111**

Home page



USE - Access

- **Change of the Access Parameters:**
  The access parameters are changeable only in **”administrator”** mode

  – Possible actions:
    - Change of the **Name and of** the **PIN** code (5 characters)
    - Change of the accessible pages
    - Enabling/Disabling of a user
    - Deleting of a user
  – Procedure:
    - Choose from the menu the user to edit
    - Make the changes
    - Click on the button

  Note: only the **”administrator”** can change these parameters; the user “administrator” should be changed by another “administrator”

USE - Access

- **Creating a new user account by the "administrator"**

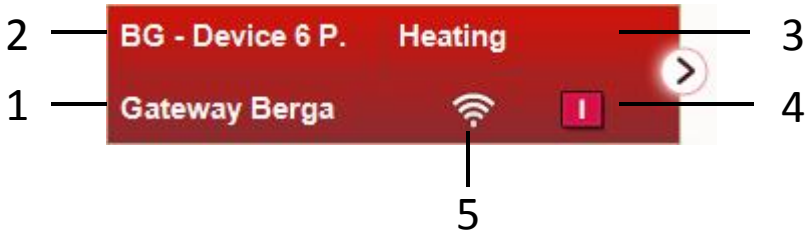
  Procedure:

  - Select "**Add user**"
  - Enter **Name, PIN** code and **PUK** code
  - Select the pages available for the new user

  - Click on the button

DISPLAY - Devices

- Description of the display page of the "Devices" (for the installers)
  - 1. Gateway Name
  - 2. Device Name
  - 3. Load type
  - 4. Circuit-breaker Status (if available on the Device)
  - 5. Communication Status (ON: /OFF: /)

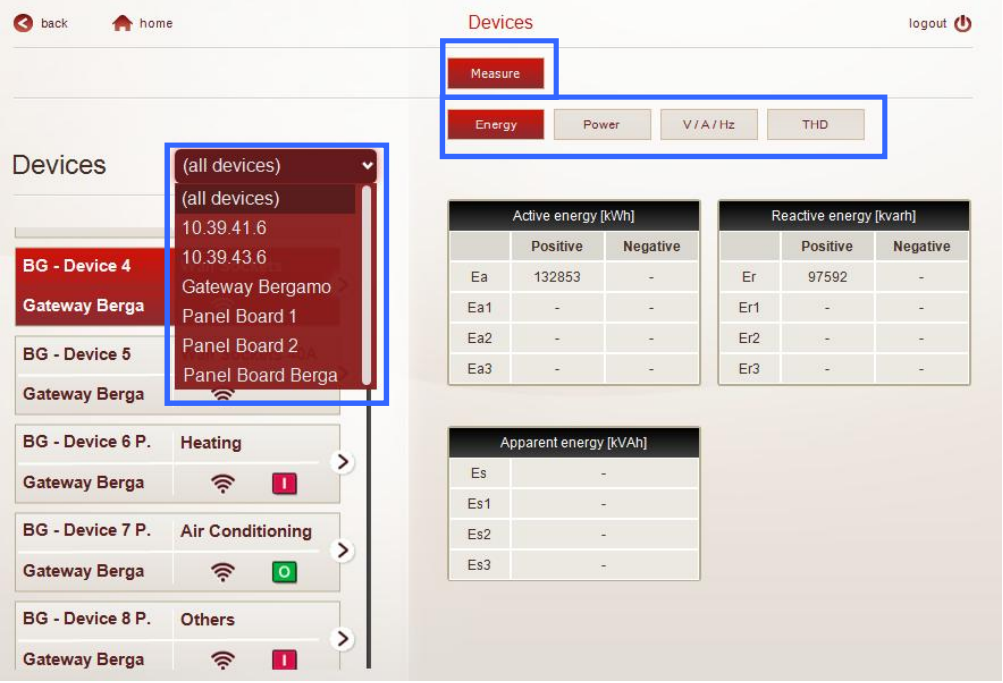


DISPLAY - Devices

- Description of the display page of the "Devices"
  - Page "Measure"

    - Visualization of the
    – Energy/Power/V/A/Hz
    – THD/Harmonics
      (if available on the Device)

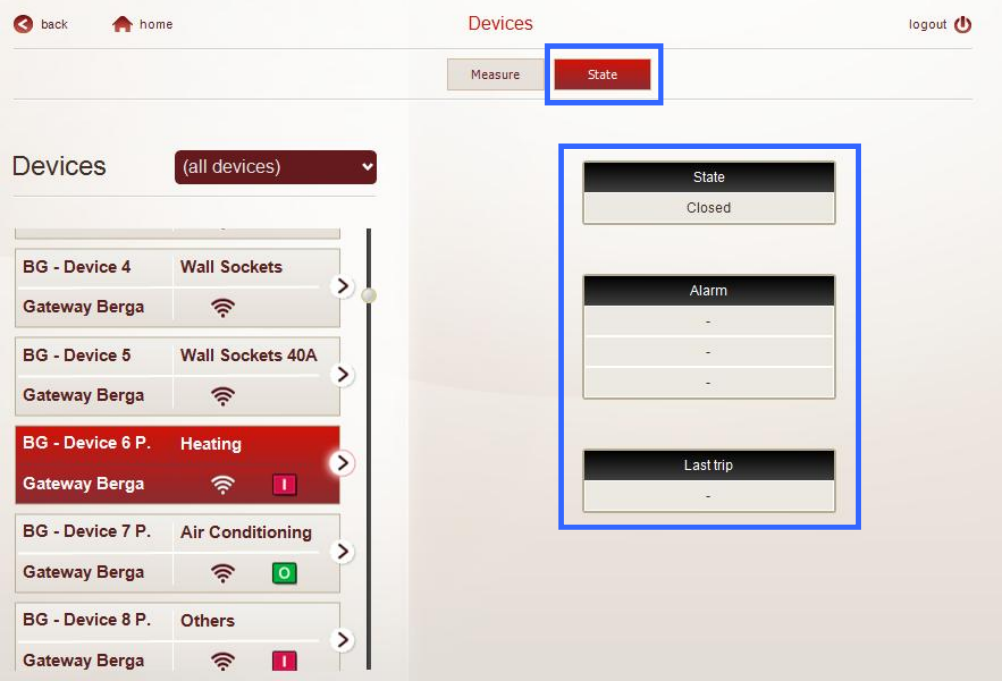
    Choice of the Device per Panel board or Gateway



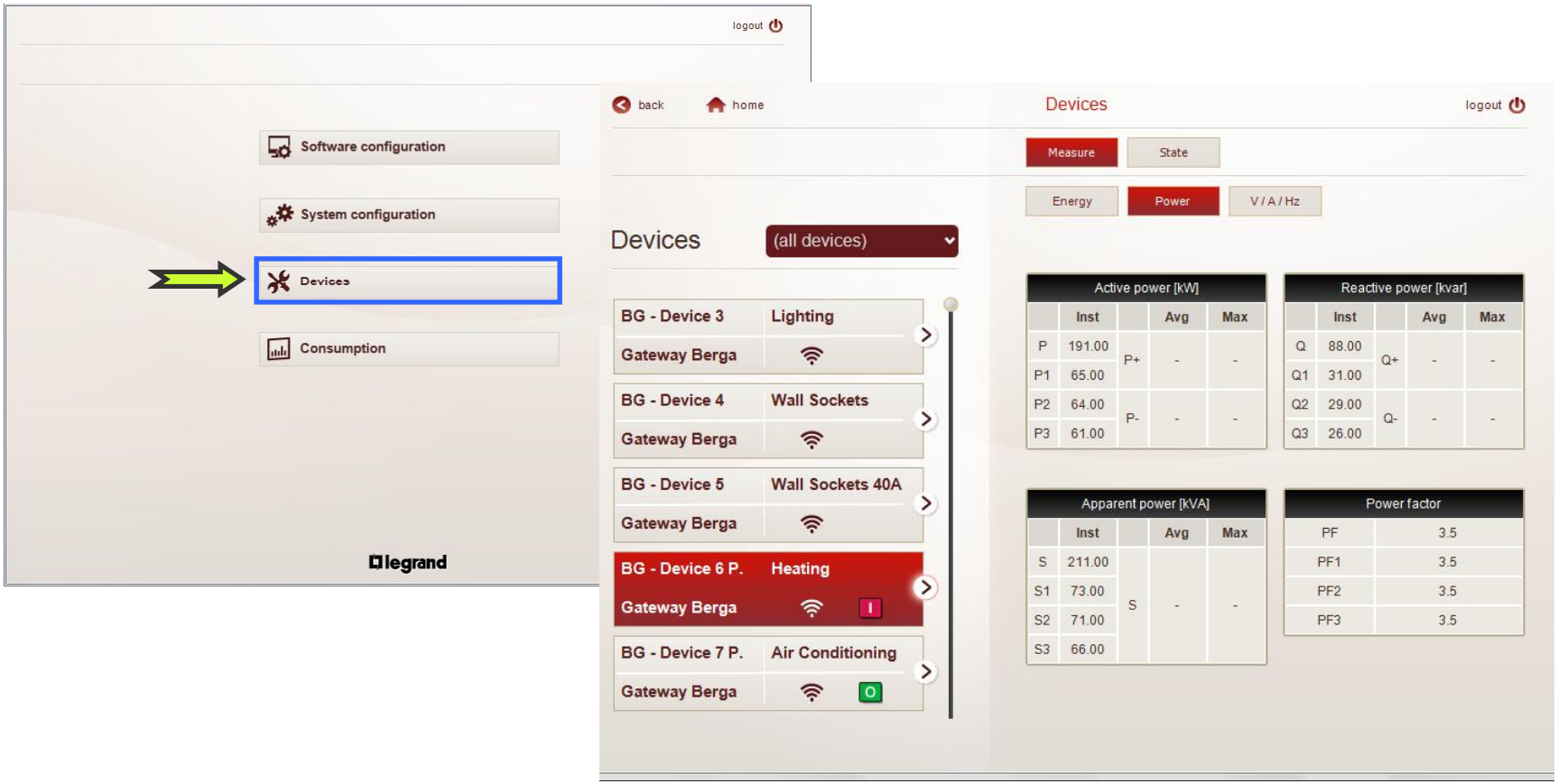
DISPLAY - Devices

- Description of the display page of the "Devices"
  - Page "State"

    - Visualization of the
      - Circuit-breaker status
      - Last three alarms
      - Current or Temperature value that caused the last trip.

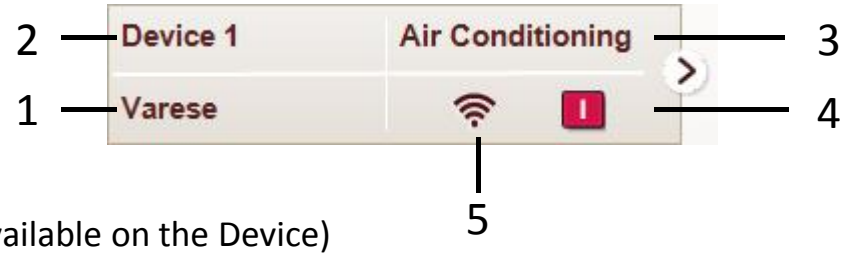


DISPLAY - Devices



DISPLAY - Consumptions

- Description of the display page of the "Consumptions" (for energy managers)
  - 1. Measure Group
  - 2. Device Name
  - 3. Load Type
  - 4. Circuit-breaker Status (if available on the Device)
  - 5. Communication Status



3 ways of displaying data

- **Grand Total** (Consumption of the entire installation)
- **Partials** (Consumptions per Load and/or Measure group)
- **Details** (Consumptions of a single Device)

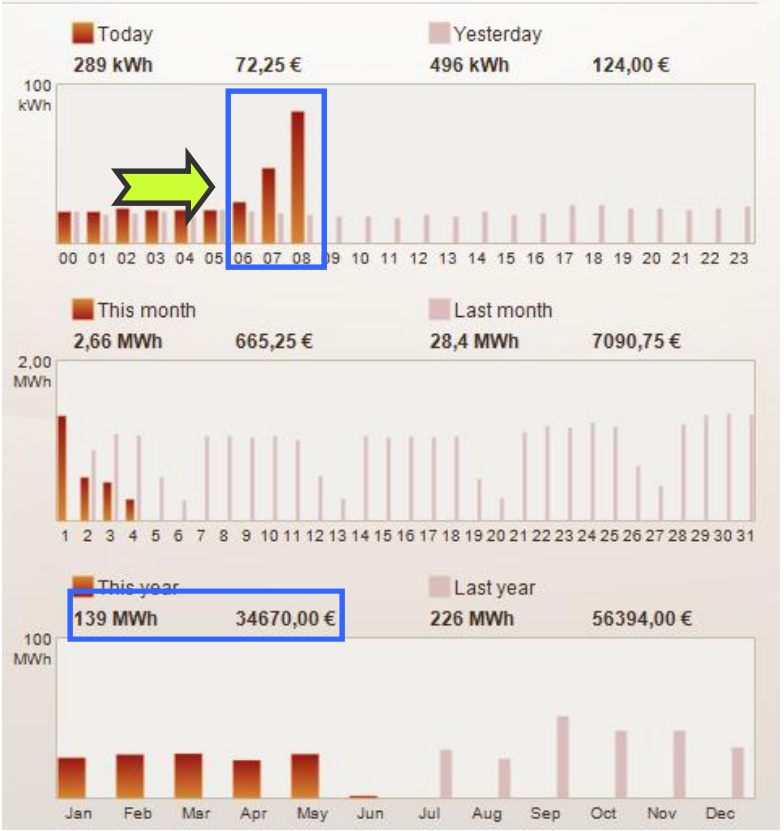
DISPLAY - Consumptions

- Details of the visualization of the consumptions

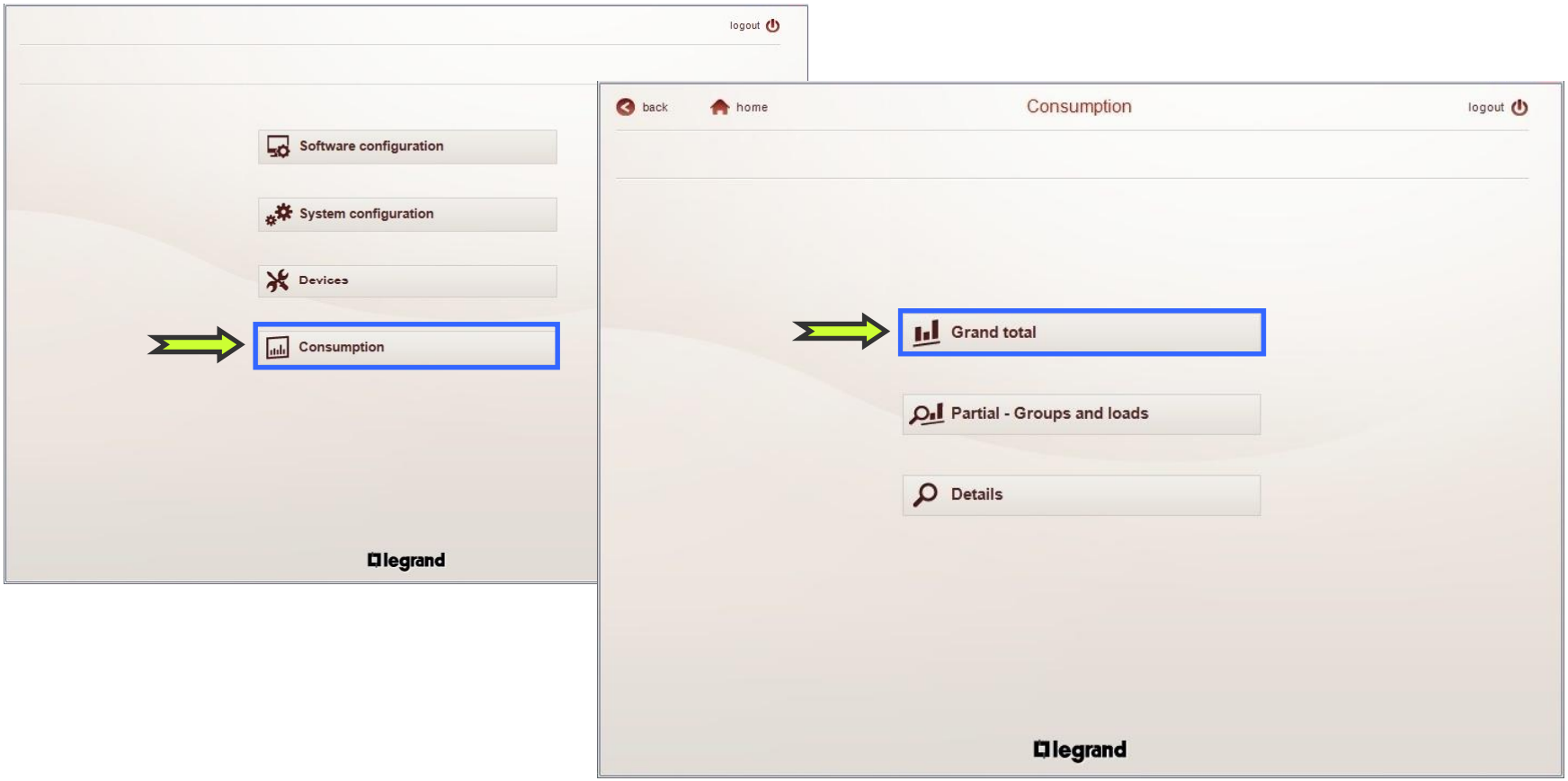
  3 histograms available
  - Day (per hour)
  - Month (per day)
  - Year (per month)

- Comparison between the current and the previous value
  (ex. today/yesterday, etc.)

- Values in kWh and € (default)



DISPLAY - Total Consumption



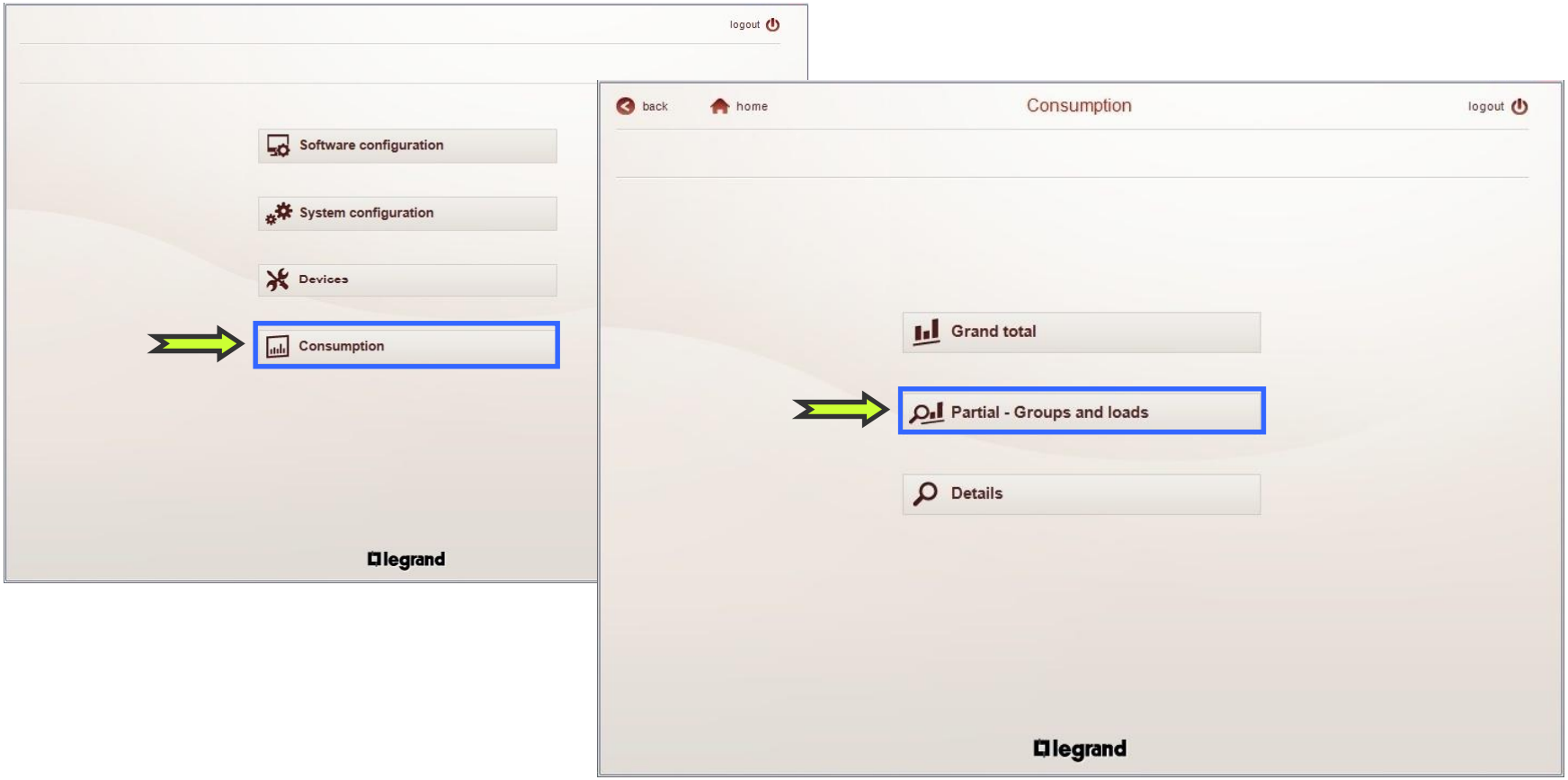
DISPLAY - Total Consumption

- Display page "Grand Total"

  – Visualization of Global Consumptions (Ea +) on histograms

    - Per day/month/year
    - Histogram per Load

DISPLAY - Partial Consumption

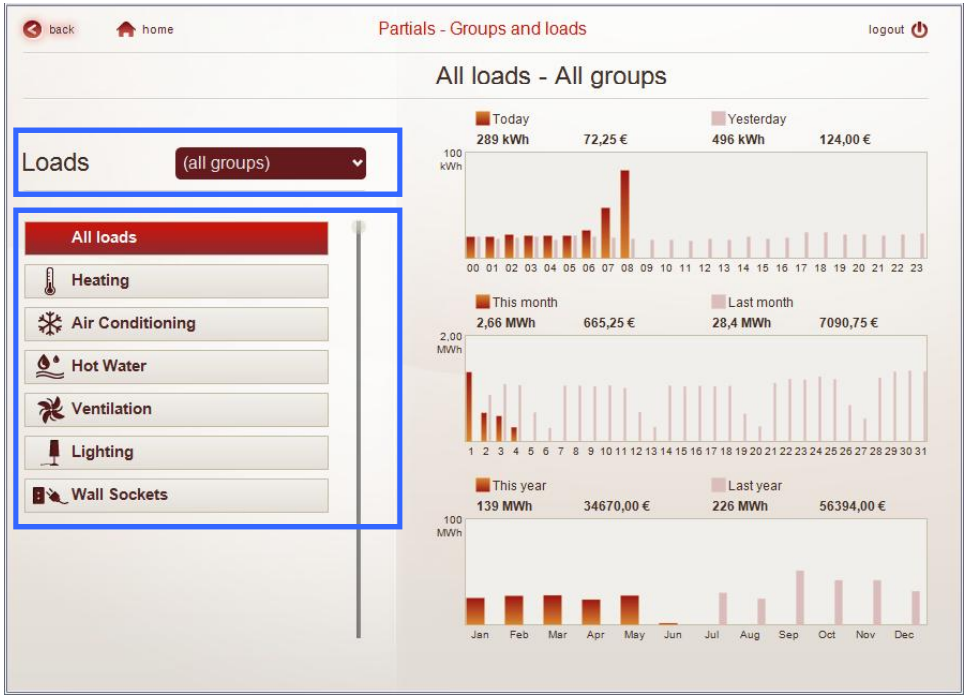


DISPLAY - Partial Consumption

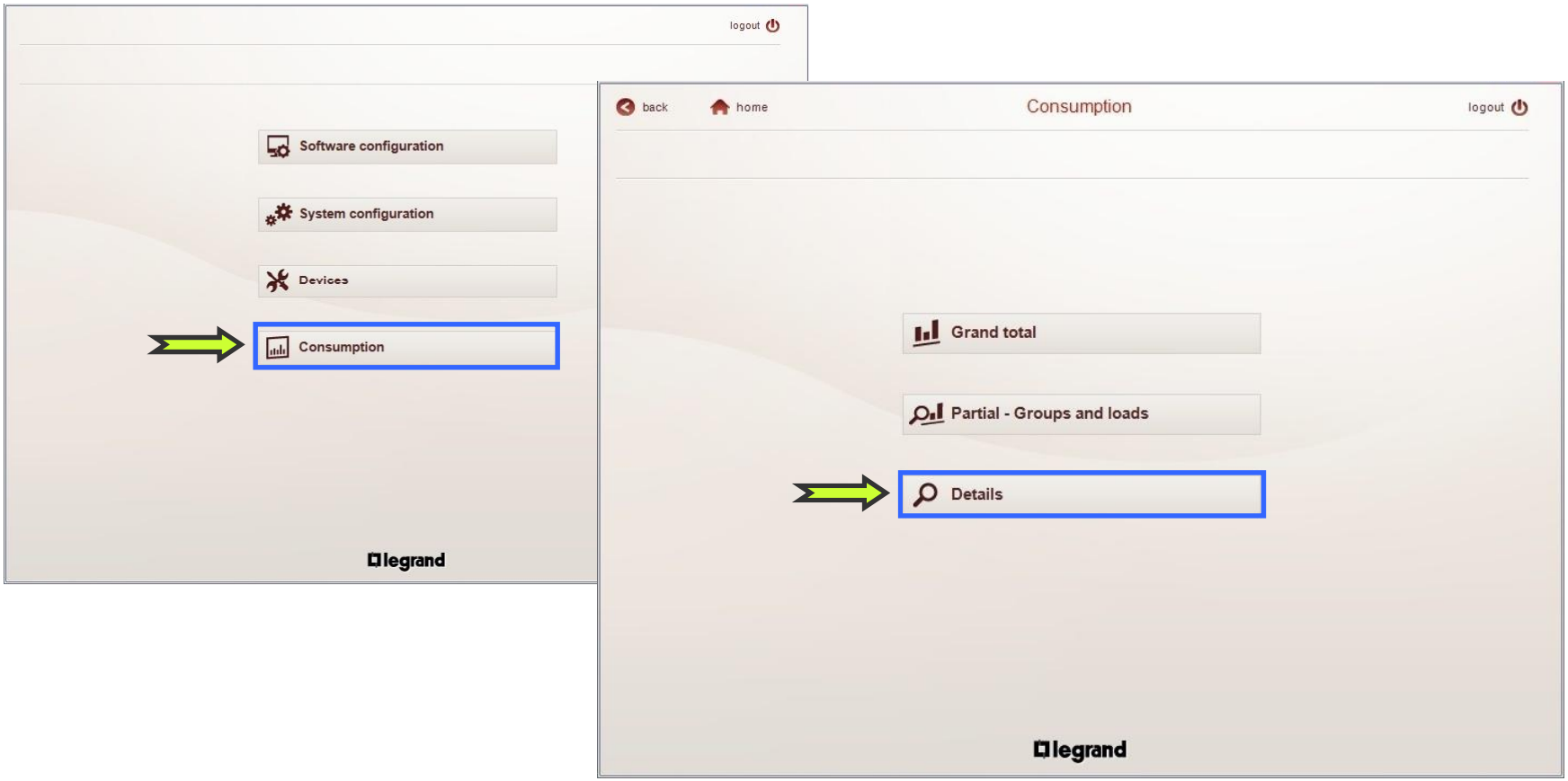
- Display page "Partial - Groups and Load type"

  – Visualization of Partial Consumptions (Ea +) on histograms

    - Selection of Loads
    - Selection of Groups



DISPLAY - Consumption Details



DISPLAY - Consumption Details

- Display page “Details”

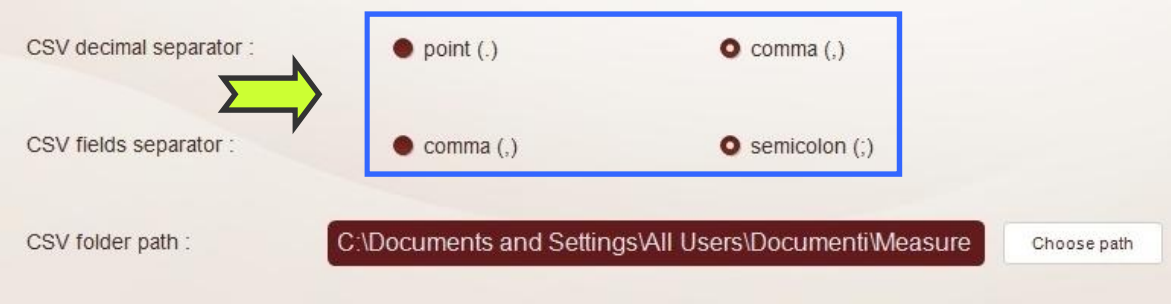
  Display similar to the “Devices” page

  - Selection of Devices
  - Search per Groups/Loads or "All Devices“
  - Visualization of Consumptions (Ea +) on histograms
  - Power, V/A/Hz, THD, Harmonics (if available)

HISTORICAL of Consumptions - standard CSV

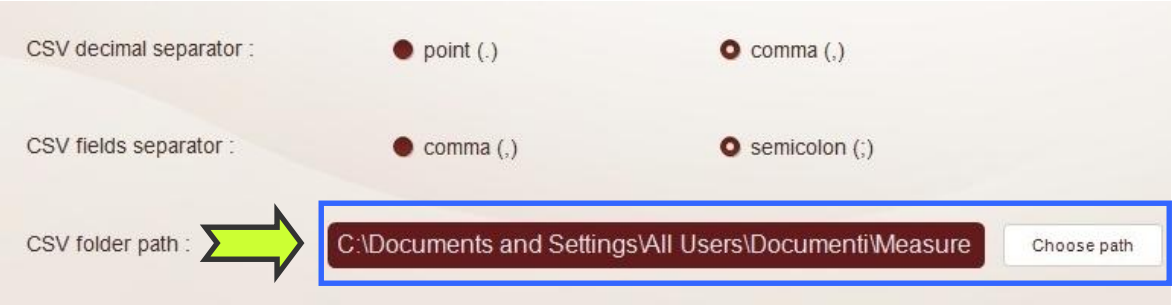
- Exporting a report in standard.CSV format
  - Compatible with Excel and “csv” files reader
  - Configurable Fields separator in **“Web Server Configuration” ⇨ “CSV and other settings”**

    Select:
    - CSV decimal separator: “comma” (default) or “point”
    - CSV fields separator: “semicolon” (default) o “comma”



HISTORICAL of Consumptions - Saving data on HD

- Saving data on the hard disk of the computer
  - Folder path for saving data configurable in **“Software Configuration”**
    ⇨ **“Language and structure CSV files”**

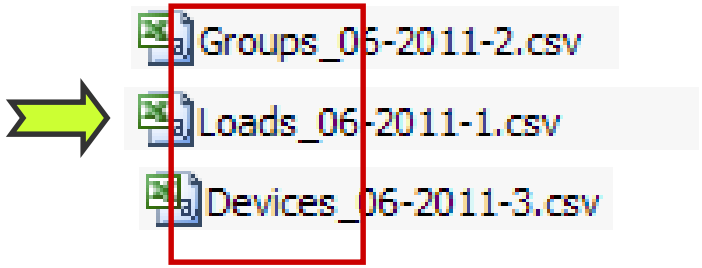


HISTORICAL of Consumptions - File Details

- Automatic creation of files according to the **System Configuration**
  - "Energy" (**Consumptions** Ea+, per Device/Loads/Groups)
  - "Devices" (several data per Device)
  - "Settings"

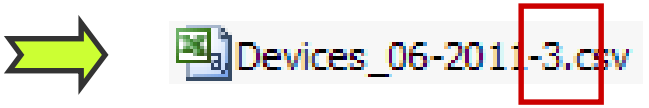
HISTORICAL of Consumptions - Files “Energy”

- “Energy”: name **type_year-month_version**
  - **.._type_..:** distribution of Consumptions
    - **groups_..:** per **Measure Groups**
    - **loads_..**: per **Loads**
    - **devices_..**: per **Devices**



  - **.._year-month..:** sampling period

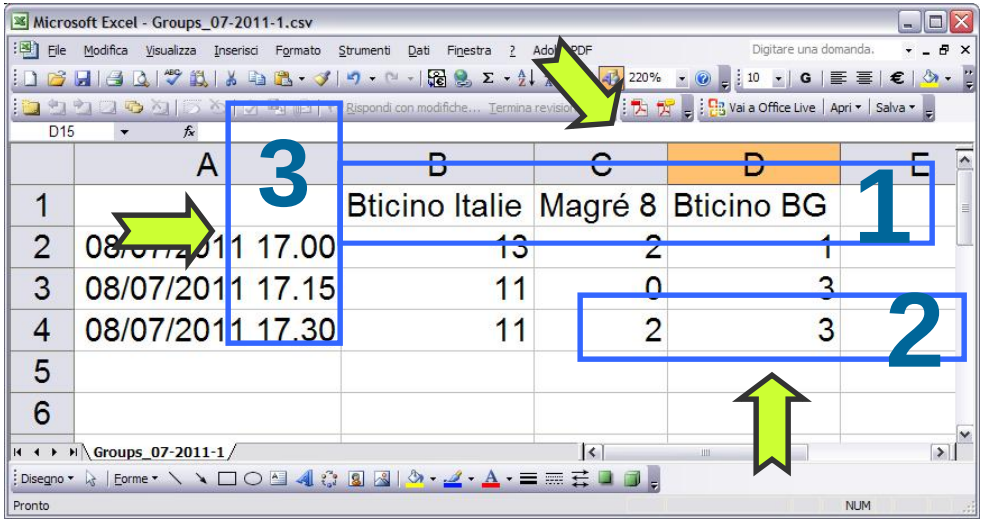
  - **.._version..:** in case of changes (adding of a Load/group/…)



HISTORICAL of Consumptions - Files “Energy”

- File “Groups” structure

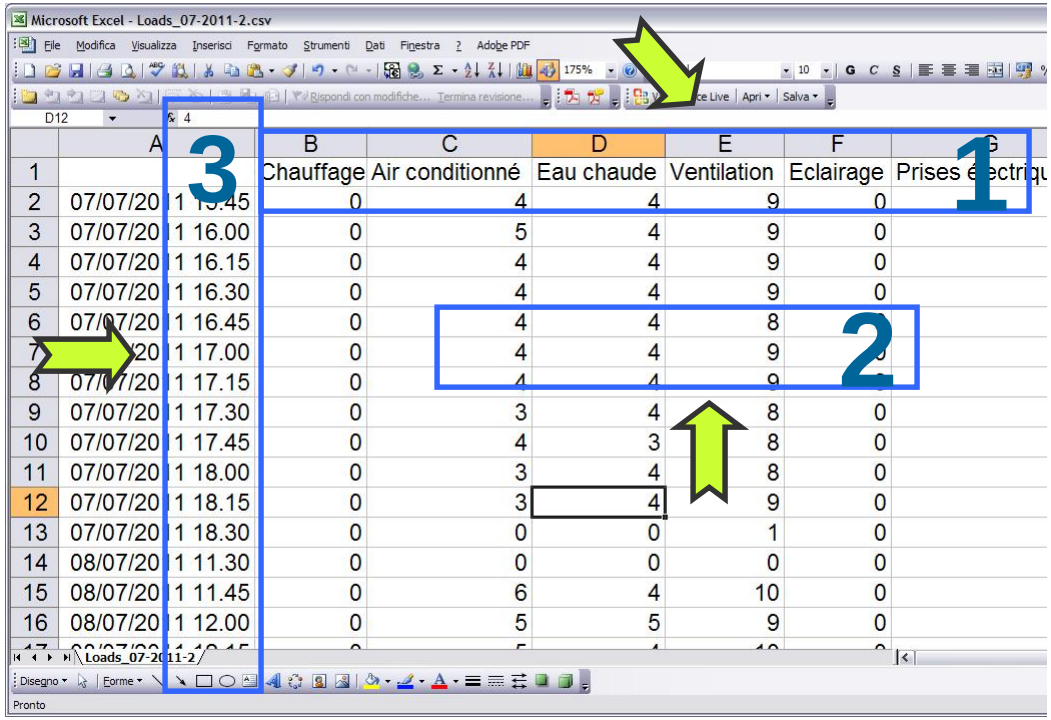
  – Consumptions:
    1. per Measure group
    2. in kWh
    3. sampling every 15min



HISTORICAL of Consumptions - Files “Energy”

- File “Loads” structure

  – Consumptions:
    1. per Load
    2. in kWh
    3. sampling every 15min

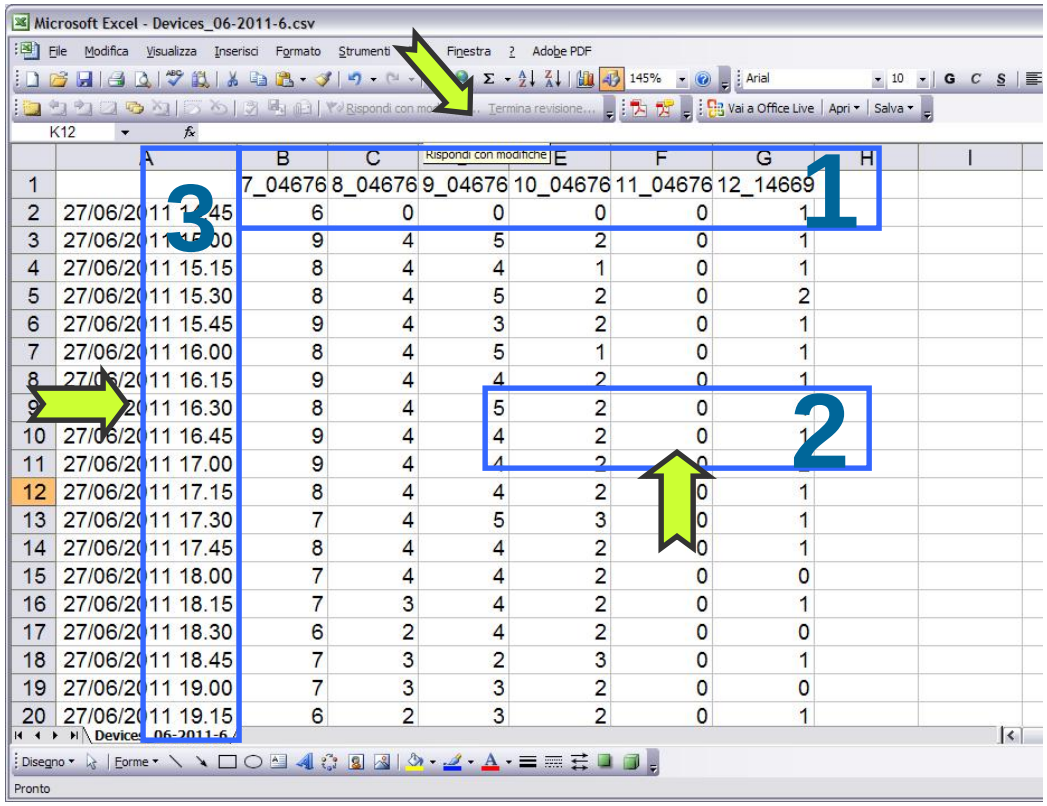


	A	B	C	D	E	F	G
1		Chauffage	Air conditionné	Eau chaude	Ventilation	Eclairage	Prises électriqu
2	07/07/20 1 15.45	0	4	4	9	0	
3	07/07/20 1 16.00	0	5	4	9	0	
4	07/07/20 1 16.15	0	4	4	9	0	
5	07/07/20 1 16.30	0	4	4	9	0	
6	07/07/20 1 16.45	0	4	4	8		
7	07/07/20 1 17.00	0	4	4	9		
8	07/07/20 1 17.15	0	4	4	9		
9	07/07/20 1 17.30	0	3	4	8	0	
10	07/07/20 1 17.45	0	4	3	8	0	
11	07/07/20 1 18.00	0	3	4	8	0	
12	07/07/20 1 18.15	0	3	4	9	0	
13	07/07/20 1 18.30	0	0	0	1	0	
14	08/07/20 1 11.30	0	0	0	0	0	
15	08/07/20 1 11.45	0	6	4	10	0	
16	08/07/20 1 12.00	0	5	5	9	0	

HISTORICAL of Consumptions - Files “Energy”

- File “Devices” structure

  – Consumptions:
    1. per Device
    2. in kWh
    3. sampling every 15min



	A	B	C	E	F	G
1		7_04676	8_04676	9_04676	10_04676	11_04676	12_14669
2	27/06/2011 1.45	6	0	0	0	0	1
3	27/06/2011 [illegible]00	9	4	5	2	0	1
4	27/06/2011 15.15	8	4	4	1	0	1
5	27/06/2011 15.30	8	4	5	2	0	2
6	27/06/2011 15.45	9	4	3	2	0	1
7	27/06/2011 16.00	8	4	5	1	0	1
8	27/06/2011 16.15	9	4	4	2	0	1
9	27/06/2011 16.30	8	4	5	2	0	1
10	27/06/2011 16.45	9	4	4	2	0	1
11	27/06/2011 17.00	9	4	4	2	0	1
12	27/06/2011 17.15	8	4	4	2	0	1
13	27/06/2011 17.30	7	4	5	3	0	1
14	27/06/2011 17.45	8	4	4	2	0	1
15	27/06/2011 18.00	7	4	4	2	0	0
16	27/06/2011 18.15	7	3	4	2	0	1
17	27/06/2011 18.30	6	2	4	2	0	0
18	27/06/2011 18.45	7	3	2	3	0	1
19	27/06/2011 19.00	7	3	3	2	0	0
20	27/06/2011 19.15	6	2	3	2	0	1

HISTORICAL of Consumptions - Files “Devices”

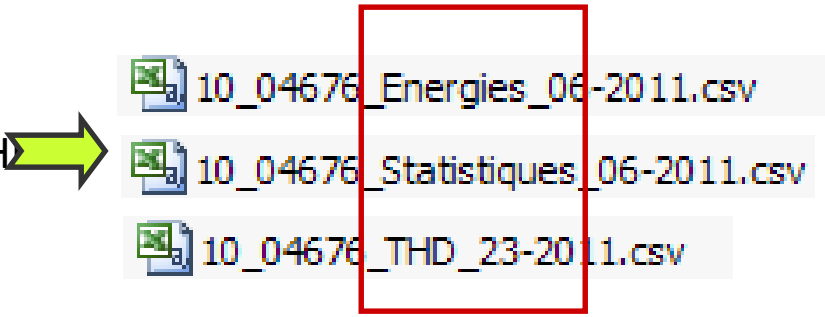
- “Devices”: name **ID_type_year-month**
  - **ID:** identification number of the device in the database

  - Correspondence
    - Page **Devices (System configuration ⇨ Gateways and devices ⇨ Devices)**
    - In CSV files **“Settings”**

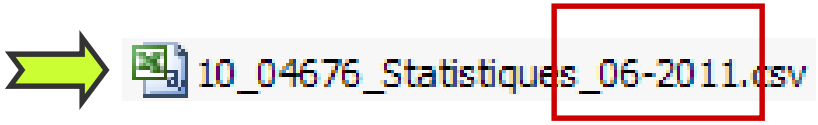
DEVICE ID	DEVICE P/N	DEVICE ADDR	GATEWAY IP ADDRESS
7	4676	1	10.33.30.9
8	4676	2	10.33.30.9
9	4676	3	10.33.30.9
10	4676	4	10.33.30.9
11	4676	5	10.33.30.9

HISTORICAL of Consumptions - Files “Devices”

- “Devices”: name **ID_type_year-month**
  - **.._type_..:** type of data*
    - **…_energy**: Ea+/Er+/Ea-/Er-/Es
    - **…_stat**: statistics U/V/I/f/P/Q/S/TH
    - **…_thd**: THD I/U/V

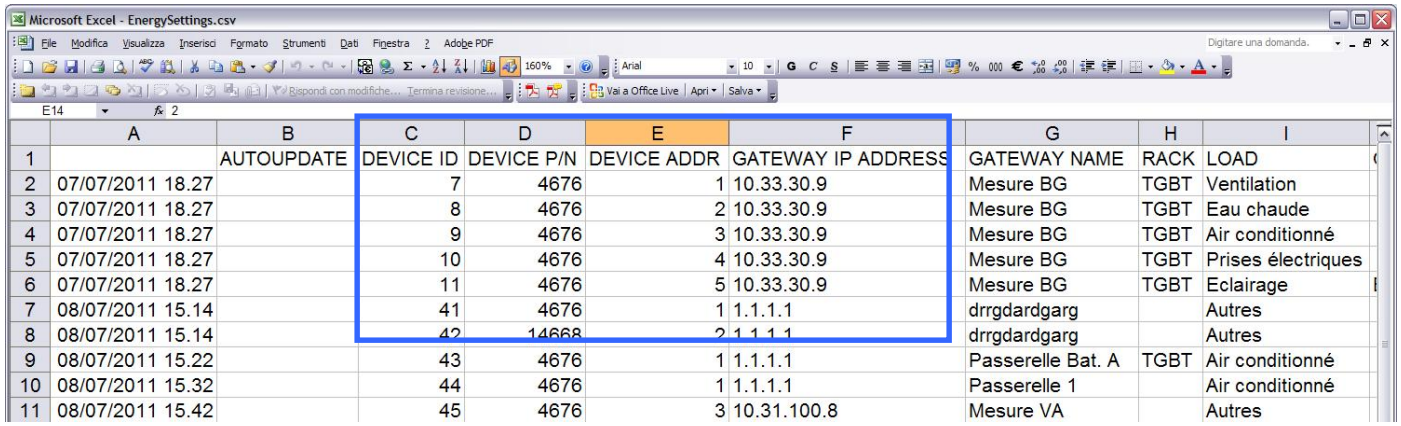


  - **.._year-month..:** sampling period



HISTORICAL of Consumptions - Files “Devices”

- “Settings”:
  - **energy Settings:**
    - Correspondence ID on the database - Device for reading of the CSV files “Devices”
    - Copy of the **System configuration**



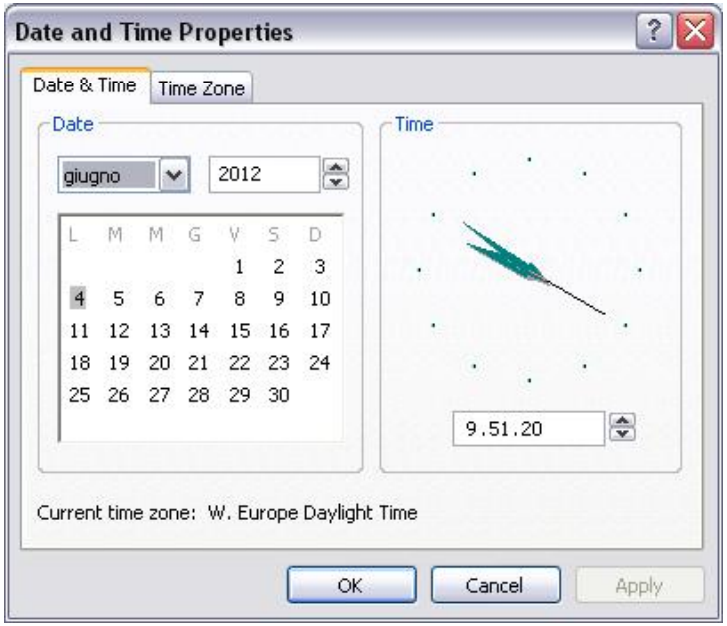
Microsoft Excel - EnergySettings.csv

	A	B	C	D	E	F	G	H	I
1		AUTOUPDATE	DEVICE ID	DEVICE P/N	DEVICE ADDR	GATEWAY IP ADDRESS	GATEWAY NAME	RACK	LOAD
2	07/07/2011 18.27		7	4676	1	10.33.30.9	Mesure BG	TGBT	Ventilation
3	07/07/2011 18.27		8	4676	2	10.33.30.9	Mesure BG	TGBT	Eau chaude
4	07/07/2011 18.27		9	4676	3	10.33.30.9	Mesure BG	TGBT	Air conditionné
5	07/07/2011 18.27		10	4676	4	10.33.30.9	Mesure BG	TGBT	Prises électriques
6	07/07/2011 18.27		11	4676	5	10.33.30.9	Mesure BG	TGBT	Eclairage
7	08/07/2011 15.14		41	4676	1	1.1.1.1	drrgdardgarg		Autres
8	08/07/2011 15.14		42	14668	2	1.1.1.1	drrgdardgarg		Autres
9	08/07/2011 15.22		43	4676	1	1.1.1.1	Passerelle Bat. A	TGBT	Air conditionné
10	08/07/2011 15.32		44	4676	1	1.1.1.1	Passerelle 1		Air conditionné
11	08/07/2011 15.42		45	4676	3	10.31.100.8	Mesure VA		Autres

  - **general**: reserved to the manufacturer

8. FAQ: change the date and time on the computer

- **Note**: **critical operation!**
  - after changing date and/or time on the computer IS NECESSARY to restart the application



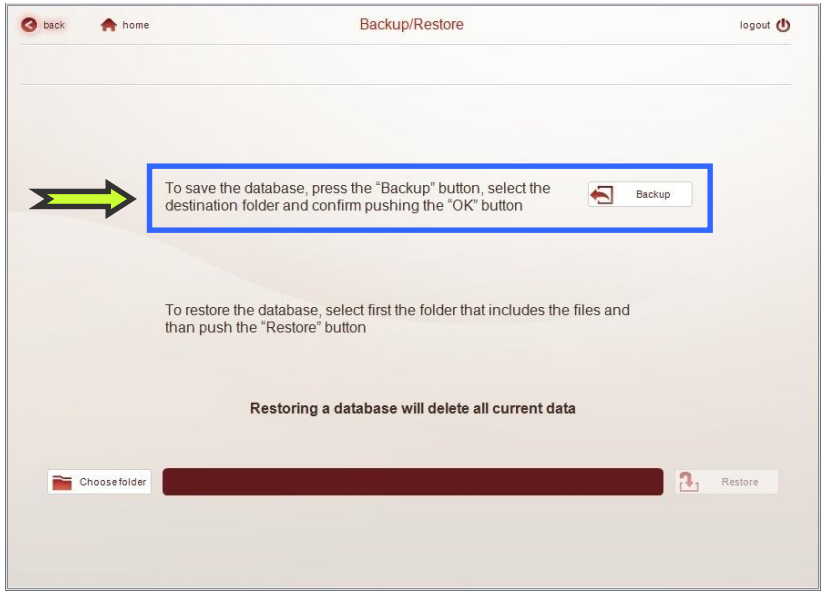
FAQ : Management of the database

- Backup / Restore of the database
  1. Click on **“Software configuration”**
  2. Click on **“Backup / Restore”**

FAQ : Management of the database - Backup

- Backup of the database:
  1. Click on **"Backup"** to access the page
  2. Choose the folder where the files will be saved
  2. Confirm the choice to perform the function

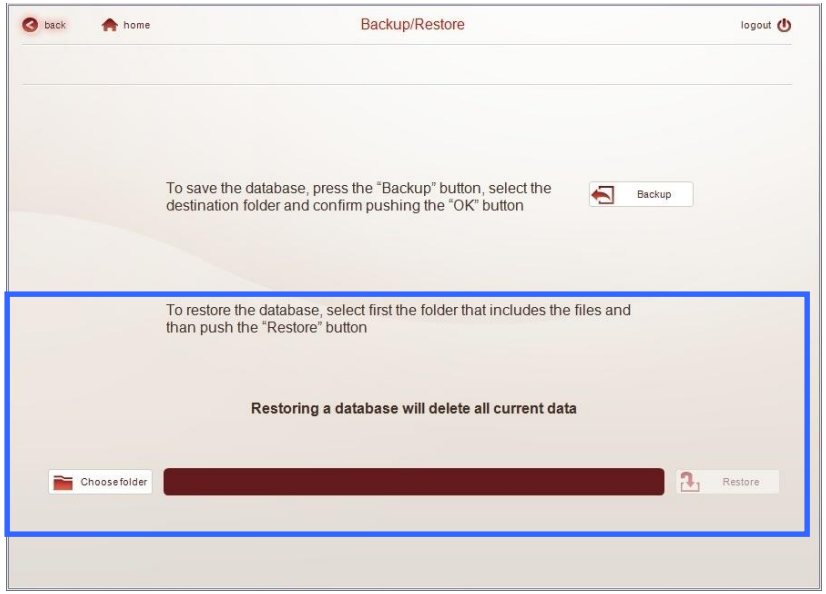
Note: not modify the folder contents (names and types of files, etc..)!


back
home
Backup/Restore
logout
To save the database, press the "Backup" button, select the destination folder and confirm pushing the "OK" button
Backup
To restore the database, select first the folder that includes the files and than push the "Restore" button
Restoring a database will delete all current data
Choose folder
Restore

FAQ : Management of the database - Restore

- Restore of the data base:
  1. Specify the folder containing the files to restore
  2. Click on **"Restore"** to perform the function

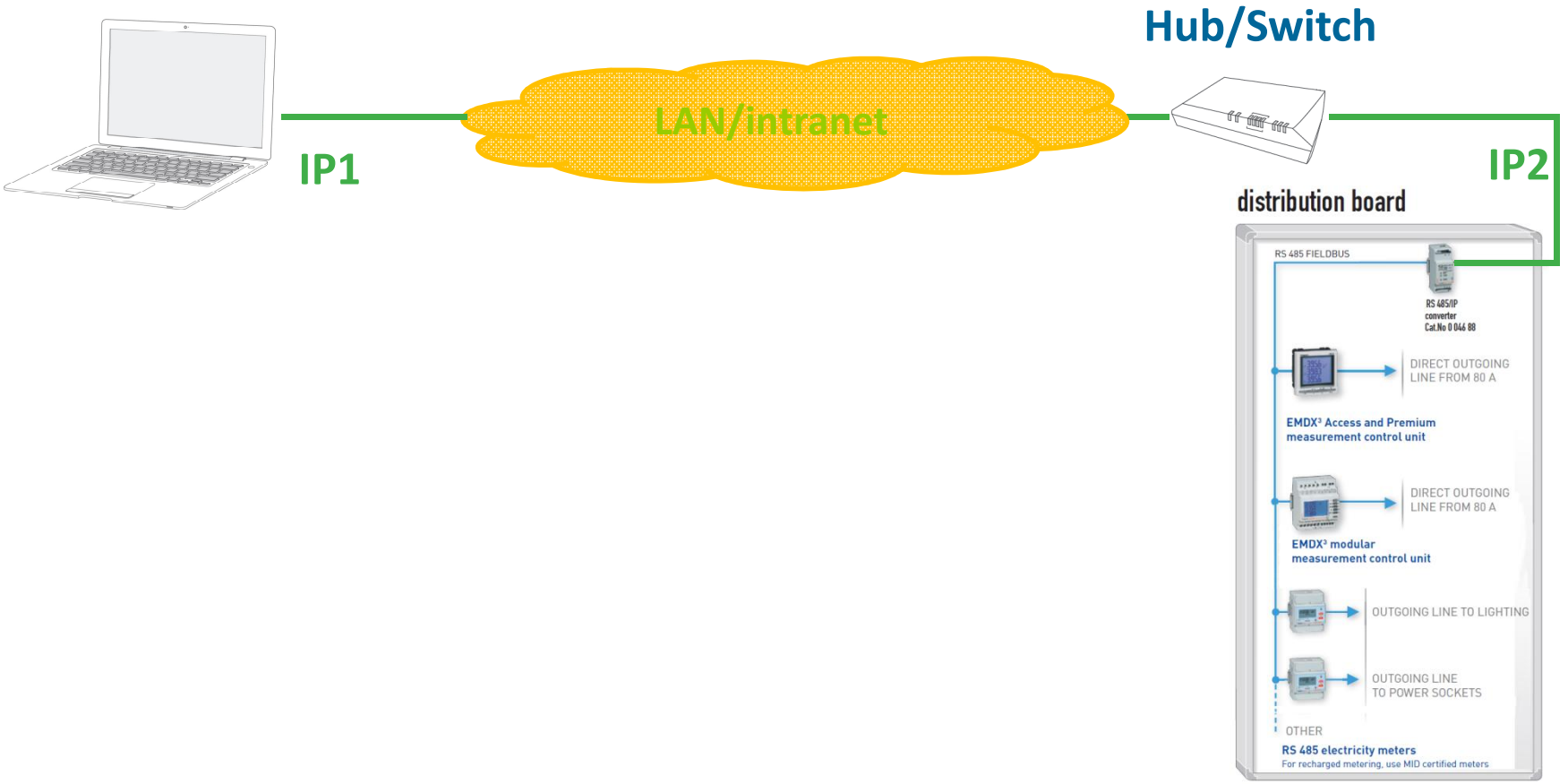
Note: the good result of the operation will be guaranteed only if the folder contents has not been modified after the backup (names and types of files, etc..)


back
home
Backup/Restore
logout
To save the database, press the "Backup" button, select the destination folder and confirm pushing the "OK" button
Backup
To restore the database, select first the folder that includes the files and than push the "Restore" button
Restoring a database will delete all current data
Choose folder
Restore

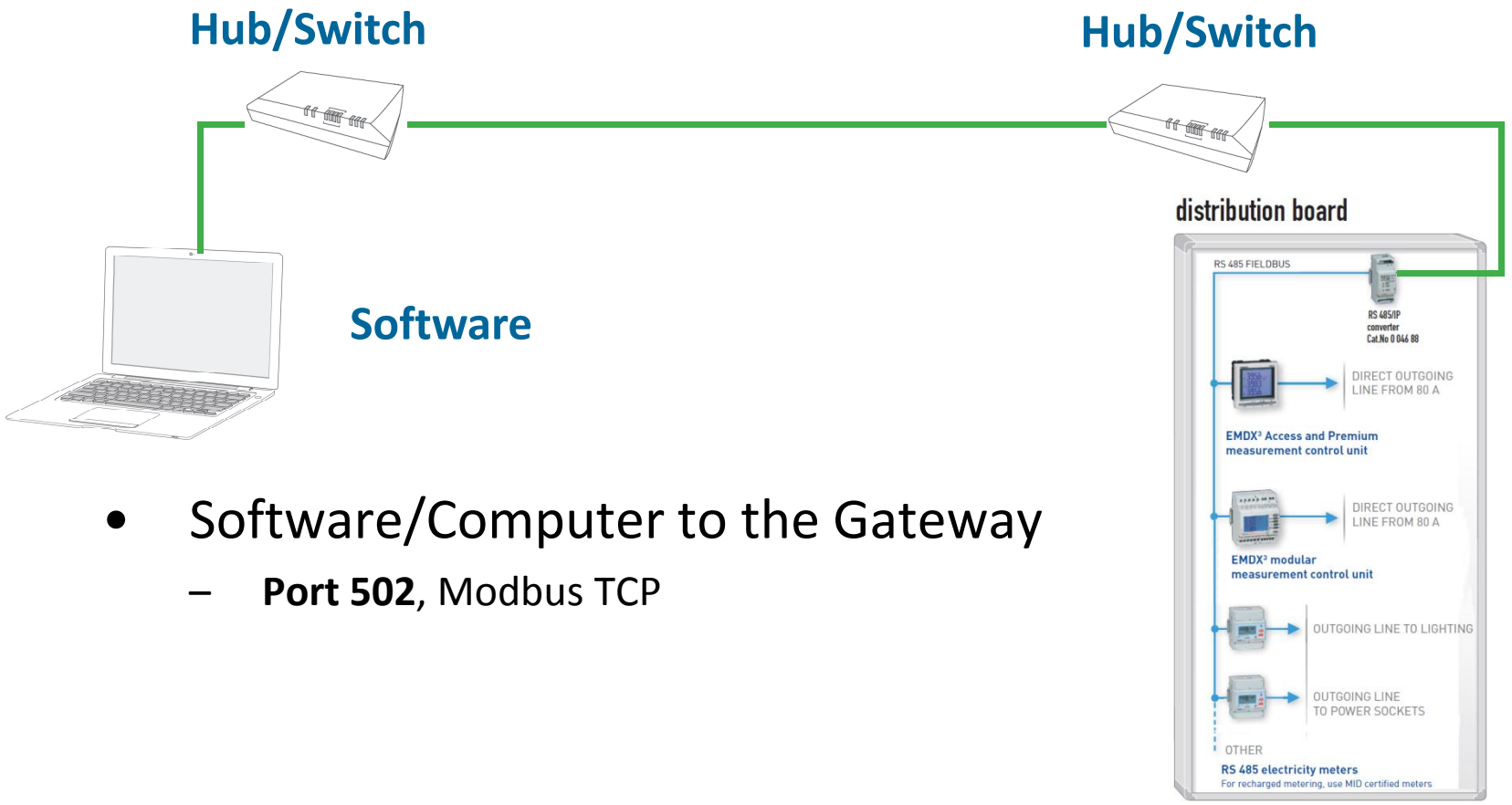
FAQ : Network type and access mode

- LAN/intranet:
  - Private network
  - Addresses and rights managed by the Manager of the building

FAQ : LAN / Intranet



FAQ : LAN / Intranet - Ports


Hub/Switch
Hub/Switch
Software
distribution board
RS 485 FIELDBUS
RS 485/IP converter Cat.No 0 046 88
DIRECT OUTGOING LINE FROM 80 A
EMDX³ Access and Premium measurement control unit
DIRECT OUTGOING LINE FROM 80 A
EMDX³ modular measurement control unit
OUTGOING LINE TO LIGHTING
OUTGOING LINE TO POWER SOCKETS
OTHER
RS 485 electricity meters
For recharged metering, use MID certified meters

- Software/Computer to the Gateway
  - **Port 502**, Modbus TCP